



MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION

UPWP

FFY 2018

***Unified Planning Work Program
With Adjustment #1***

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Complaints are to be filed no later than 180 days from the date of the alleged discrimination. Please contact Glenn Eaton at 978-345-7376 ext. 310 for more information.

**MPO Endorsed
July 19, 2017**

Prepared in cooperation with the Massachusetts Department of Transportation and the U.S. Department of Transportation. The views and opinions of the Montachusett Regional Planning Commission expressed herein do not necessarily state or reflect those of the Massachusetts Department of Transportation or the U.S. Department of Transportation.

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MONTACHUSETT

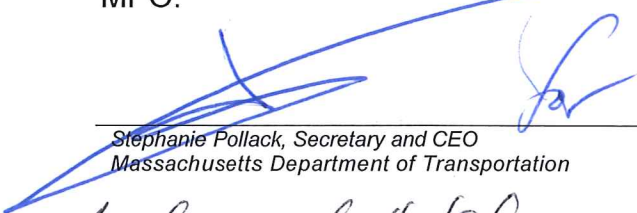
REGIONAL PLANNING COMMISSION

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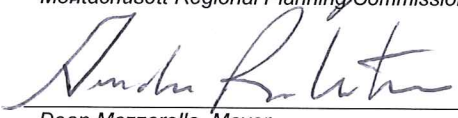
MPO ENDORSEMENT FFY 2018 UNIFIED PLANNING WORK PROGRAM

The Unified Planning Work Program (UPWP) for the Montachusett Metropolitan Planning Organization (MPO) is a financial programming tool developed annually as part of the federally certified transportation planning process. In accordance with federal guidelines, the FFY 2018 (October 1, 2017 - September 30, 2018) Unified Planning Work Program for the Montachusett MPO was developed and submitted for a 21-day public review and comment period. Comments received have been addressed and are reflected in the final FFY 2018 Unified Planning Work Program. The Montachusett Joint Transportation Committee (MJTC) has reviewed the document and has recommended its endorsement by the members of the MPO.

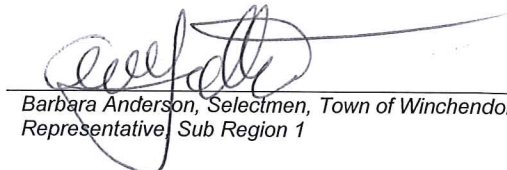

Stephanie Pollack, Secretary and CEO
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John A. Telepciak, Chairman
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Mark Hawke, Chairman
Montachusett Regional Transit Authority


Dean Mazzearella, Mayor
City of Leominster

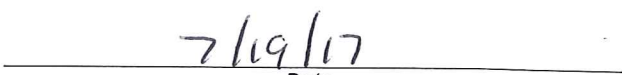

Stephen DiNatale, Mayor
City of Fitchburg


Barbara Anderson, Selectmen, Town of Winchendon
Representative, Sub Region 1


Kyle Johnson, Selectmen, Town of Ashburnham
Representative, Sub Region 2


Paula Bertram, Selectmen, Town of Lunenburg
Representative, Sub Region 3


Stanley B. Starr, Jr., Selectmen, Town of Lancaster
Representative, Sub Region 4


Date

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MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION SIGNATORIES

Massachusetts Department of Transportation (MassDOT) Secretary	Stephanie Pollack
MassDOT Highway Division Administrator	Thomas Tinlin, P.E.
Montachusett Regional Planning Commission (MRPC) Chairman	John A. Telepciak
Montachusett Regional Transit Authority (MART) Chairman	Mayor Mark Hawke
Mayor City of Leominster	Mayor Dean Mazzarella
Mayor City of Fitchburg	Mayor Stephen DiNatale
Winchendon Board of Selectmen <i>Subregion 1</i>	Barbara Anderson
Ashburnham Board of Selectmen <i>Subregion 2</i>	Kyle Johnson
Lunenburg Board of Selectmen <i>Subregion 3</i>	Paula Bertram
Lancaster Board of Selectmen <i>Subregion 4</i>	Stanley B. Starr, Jr.

MPO SUB-SIGNATORY COMMITTEE MEMBERS

David Mohler, Director OTP, MassDOT, for Secretary Stephanie Pollack
Arthur Frost, Project Development Engineer for Administrator Thomas Tinlin
Glenn Eaton, Executive Director, MRPC, for Chairman Telepciak
Mohammed H. Khan, Administrator, MART, for Chairman Mayor Hawke

EXOFFICIO MEMBERS

Jeffrey H. McEwen, Administrator	Federal Highway Administration
Mary Beth Mello, Administrator	Federal Transit Administration

MONTACHUSETT REGIONAL PLANNING COMMISSION (MRPC) OFFICERS

John A. Telepciak, Chairman	Phillipston
Guy Corbosiero, Vice Chairman	Winchendon
Michael Pineo, Secretary	Sterling
Alan Pease, Treasurer	Ashby
Roger Hoyt, Asst. Treasurer	Ashburnham

MONTACHUSETT JOINT TRANSPORTATION COMMITTEE (MJTC) OFFICERS

Jon Wyman, Chairman	Westminster
Noreen Piazza, Vice Chairman	Lancaster
Doug Walsh, Secretary	Athol

MONTACHUSETT REGIONAL PLANNING COMMISSION STAFF

Glenn Eaton, Executive Director
Linda Parmenter, Administrative/Human Resources Director
Bobbi Jo Johnson, Fiscal Director
Brad Harris, Transportation Director
George Snow, Principal Transportation Planner
Sheri Bean, Principal Planner
Brian Doherty, Principal Planner
George Kahale, Transit Director
John Hume, Planning and Development Director
Karen Chapman, Principal Planner
Noam Goldstein, Regional Planner
Brian Keating, Community Development Manager
Jason Stanton, GIS/IT Director
Kayla Kress, GIS Technician
Holly Ford, Administrative Assistant

MONTACHUSETT JOINT TRANSPORTATION COMMITTEE

<u>COMMUNITY</u>	<u>APPOINTED BY SELECTMEN/MAYOR</u>	<u>APPOINTED BY PLANNING BOARD</u>
Ashburnham	Jessica Caouette	Joseph McPeak
Ashby		Alan Pease
Athol	Doug Walsh	Doug Walsh
Ayer	Pauline Hamel	
Clinton	Phil Duffy	
Fitchburg		Paula Caron
Gardner	Treavor Beauregard	
Groton		Russell Burke
Harvard		Erin McBee
Hubbardston		
Lancaster		Noreen Piazza
Leominster	David DiGiovanni	
Lunenburg	Kenneth Chenis	Kenneth Chenis
Petersham	Nancy Allen	
Phillipston	Gordon Robertson	
Royalston	Roland Hamel	
Shirley		Robert Thurston
Sterling	John Kilcoyne	Michael Pineo
Templeton		Charles Carroll
Townsend	Ed Kukkula	
Westminster		Jon Wyman
Winchendon	Al Gallant	Tracy Murphy

EXOFFICIO MEMBERS

Nicole Tishler	Office of Transportation Planning (OTP) and Massachusetts Department of Transportation (MassDOT)
Jeffrey H. McEwen	Federal Highway Administration (FHWA), Administrator
Mary Beth Mello	Federal Transit Administration (FTA), Administrator
	Department of Environmental Protection (DEP)
Jeffery Hoynoski	MassDOT Highway Division - District 2
Arthur Frost	MassDOT Highway Division - District 3
	Montachusett Regional Planning Commission (MRPC)
Mohammed Khan	Montachusett Regional Transit Authority (MART)

ORGANIZATION MEMBERS

Al Futterman	Nashua River Watershed Association (NRWA)
Tony Salerno	Amalgamated Transit Union #690 (ATU 690)
Kit Walker	Fitchburg Airport Commission
	North Central MA Chamber of Commerce
	Fitchburg Council on Aging
Thatcher W. Kezer III	Mass Development
Peter Lowitt	Devens Enterprise Commission (DEC)
Patricia Pistone	Montachusett Opportunity Council, Inc.
Robert Benoit	The ARC of Opportunity

INTRODUCTION

The Unified Planning Work Program (UPWP) for the Montachusett Metropolitan Planning Organization (MPO) is a financial programming tool developed annually as part of the federally certified transportation planning process. This document contains task descriptions of the transportation-planning program of the MPO, with associated budget information and funding sources for the 2017-2018 program year.

The purpose of the UPWP is to ensure a comprehensive, cooperative, and continuing (3C) transportation planning process in the Leominster - Fitchburg Urbanized Area and the Montachusett Region. In addition, this document provides for the coordination of planning efforts between communities in the Montachusett Region.

MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION (MMPO)

All urbanized areas with a population greater than 50,000 are required by the U.S. Department of Transportation (USDOT) Federal regulations to designate an MPO for the area. The establishment of an MPO is necessary for the State to receive Federal transportation funds. In the Montachusett Region, the Montachusett Regional Planning Commission (MRPC) serves as staff for the MPO. The MRPC staff annually produces a Transportation Improvement Program (TIP) and Unified Planning Work Program (UPWP). In addition, a Regional Transportation Plan is updated periodically to reflect the changing transportation needs of the area. In July of 2015, the MPO formally endorsed the 2016 Regional Transportation Plan.

The MPO in the Montachusett Region (after reorganization in October 2001) is currently comprised of:

- the Secretary and CEO of the Massachusetts Department of Transportation (MassDOT);
- the Administrator of MassDOT Highway Division;
- the Chairman of the MRPC;
- the Chairman of the Montachusett Regional Transit Authority (MART);
- the mayors of Fitchburg, Leominster and Gardner and;
- one Selectman from each of four geographically defined sub Regions.

These sub regions are composed as such:

- Subregion 1) Athol, Hubbardston, Petersham, Phillipston, Royalston, Templeton, and Winchendon;
- Subregion 2) Ashburnham, Ashby, Groton, Townsend, and Westminster;
- Subregion 3) Ayer, Harvard, Lunenburg and Shirley and;
- Subregion 4) Clinton, Lancaster, and Sterling.

These 10 members serve as the MPO Policy Board for the regional "3C" transportation planning process. It was felt that increasing the MPO to 10 members would allow for more local input and greater public participation and as such an inter-agency Memorandum of Understanding, entitled "Memorandum of Understanding (MOU) Relating to the Comprehensive, Continuing and Cooperative Transportation Planning Process for the Montachusett Region Metropolitan Planning Organization", defining the expanded MPO, was formally agreed to

MONTACHUSETT MPO	
SIGNATORIES	Secretary & CEO, MassDOT
	Administrator, MassDOT Highway Division
	Chair, MRPC
	Chair, MART
	Mayor, City of Fitchburg
	Mayor, City of Gardner
	Mayor, City of Leominster
	Representative, Subregion 1 (Athol, Hubbardston, Petersham, Phillipston, Royalston, Templeton, Winchendon)
	Representative, Subregion 2 (Ashburnham, Ashby, Groton, Townsend, Westminster)
	Representative, Subregion 3 (Ayer, Harvard, Lunenburg, Shirley)
	Representative, Subregion 4 (Clinton, Lancaster, Sterling)

in September 2001. This MOU was reviewed, revised, updated and endorsed by the MPO on February 4, 2009. The makeup and composition of the MPO remained the same but a revised method to select subregion representatives was adopted. On April 13, 2011, the MOU was updated and endorsed to reflect the Massachusetts Transportation Reform Act enacted on June 26, 2009 that established the Massachusetts Department of Transportation. During the fall/winter of 2015/2016, the representatives and alternates for the four identified subregions went through a selection process to update membership and participation. These individuals will serve for a three-year period beginning in September/October of 2016.

In addition to the MPO signatories, members/representatives from various federal, state and regional agencies are identified as Ex-Officio Members to the MPO that provide valuable input and guidance to all MPO actions and decisions. The Ex-Officio Members are identified on page iv of this document.

TRANSPORTATION/TRANSIT PLANNING IN THE MONTACHUSETT REGION

During the 2017-2018 program year, the MRPC will continue its efforts to maintain a viable transportation planning process through several tasks outlined in this UPWP. Each task describes the efforts to be made to address a particular issue or area of concern along with intended products, timeframes, budgets and funding sources.

MRPC staff will continue work on a study of the potential for a new interchange on Route 2 at South Athol Road in Athol. Begun in the 2016-2017 program year, this task will continue to analyze the potential needs and impacts associated with a new interchange. Close coordination with the town of Athol will be maintained throughout the study.

The MRPC will continue to work with the Montachusett Regional Trail Coalition (MRTC) and update the Regional Trail Map for the Montachusett Region. Originally developed in 2012, the trail guide is a great resource to residents and visitors of the region and has been quite popular at the Johnny Appleseed Visitor Center along Route 2 as well as at other locations such as hotels, restaurants and attraction sites in the area.

Staff will continue sidewalk inventories along the MART bus routes in the City of Gardner. This inventory will focus on current major bus routes and stops to determine where the bicycle and pedestrian connections are and where they are needed. This will expand the work that was done in the previous year in Fitchburg and Leominster.

The Geographic Information System (GIS) will continue to support various work activities under several UPWP tasks as well as provide local assistance through our program of providing 8 free hours of GIS service to member communities. In addition, the GIS Department will continue work to expand and improve the MRPC's online GIS web mapping program, MRMapper. Several datalayers and applications continue to be updated on the site such as traffic counts, roadway functional classification information, crash data and trail locations. The GIS department will continue to provide assistance related to the prior development of a handheld application designed to assist communities in the collection of data to meet EPA Phase 2 stormwater requirements.

In addition to these tasks, MRPC will continue its traffic counting program. The traffic counting program consists of automatic traffic recorder counts necessary to determine average daily traffic (ADT) throughout the region as well as determining speed and classification data. Requests for ADT information come from local communities concerned about safety or future highway improvements and the MassDOT as part of its statewide traffic counting program. MRPC also makes use of a video traffic counting system, known as Miovision, to collect data at locations previously too difficult or complex to do by traditional means. Two newly acquired radar counter units also are utilized throughout the region at problem locations.

Public participation is also a vital element of the transportation planning process. Community representatives of the Montachusett Joint Transportation Committee (MJTC) meet every month on the second Wednesday to discuss transportation projects and issues of regional importance. Membership on the MJTC is solicited every April to June from communities and organizations. Certain communities lack membership on the MJTC through non-appointments. Staff continues to reach out and work with communities in an attempt to encourage new appointments to and attendance at the MJTC. This effort could include direct calls to the towns or targeted emails and surveys to ascertain any impediments to attendance. In early 2017, in response to member input, the MJTC meetings were moved from the third to the second Wednesday of the month. In addition, the start time was moved to 6:30 PM in an effort to increase local participation.

An updated and revised Public Participation Plan (PPP), developed to assist and guide the Montachusett MPO in its outreach efforts, was endorsed by the MPO in May of 2016. This PPP was submitted for a 45-day public review and comment period in March – May 2016. The PPP attempts to more closely follow the state's PPP as well as feedback from the MassDOT Office of Diversity and Civil Rights (ODCR). Issues of Environmental Justice and Title VI of the Civil Rights Act of 1964 and their relationship to the MRPC will continue to be reviewed during the upcoming program year. In April of 2017, the PPP was Amended to change the duration of the public comment periods for the TIP, UPWP and RTP from 30 days to 21 days. This change will allow the MPO to maintain a more consistent meeting schedule throughout the year. Updates to the MPO endorsed Limited English Proficiency (LEP) Access Plan as well as submittals of annual reports indicating the work done to meet state and federal regulations will be addressed as required related to Title VI and EJ. The MRPC will continue to utilize its web page at www.mrpc.org to post information in order to provide an additional outlet for public awareness.

The Unified Planning Work Program (UPWP) also continues to demonstrate a high level of cooperation between MRPC and the Montachusett Regional Transit Authority (MART).

Prior federal provisions have identified the Massachusetts Department of Transportation as the recipient of statewide Section 5303 program funds and to also have the responsibility under present state law to administer FTA grants and to establish a statewide transit-planning program in cooperation with the MPO. The Montachusett MPO has been allocated \$62,227 in federal FY2018 Section 5303 funds. The MMPO holds harmless this allocation.

During this program year, the MPO will continue to be involved in several planning areas relating to mass transit and will continue to coordinate with other transportation related activities undertaken by the MPO. The planning areas include coordination with 3C management process, continuation of monitoring services and updating mass transit activities in the Montachusett Region, cooperation in developing transit related funding categories for the TIP and conducting special studies. The MPO staff will conduct an update to the Coordinated Public Transit - Human Services Transportation Plan for the Region. The prior Coordinated Plan which was last endorsed in January 2015. This Plan focuses on three target populations within the Montachusett region, individuals with disabilities, low-income individuals (or persons below the poverty level) and the elderly, and seeks to identify gaps in existing transportation services and needs to meet those gaps.

PRIOR YEAR UPWP TASK RESULTS

During the prior program year from October 1, 2016 to April 30, 2017, the following studies and/or tasks were undertaken. Some tasks were under development at the time of the writing of this UPWP. In those cases, the anticipated outcome is identified. For more detailed information regarding any of these tasks, please contact the MRPC.

Task 2.12 Regional Demographics & Model

- TransCAD software training;
- Road Network updates to reflect current MassDOT road inventory file;
- Traffic Analysis Zones (TAZs) updates to reflect current block group geographies;
- A regional population projections report was developed for use in modeling applications;
- 2015 American Community Survey (ACS) household census data compiled for model application.

Task 2.32 Data Collection and Analysis Program

- The MRPC Regional Crash Database updated with MassDOT 2012 – 2014 Crash Data;
- Additional crash reports for the most recent 3-year period collected from the:
 - Lancaster Police Department for the Route 70 & Old Union Turnpike Roundabout, and the;
 - Athol Police Department for truck routes for the South Athol Road Interchange Study.

Task 2.42 Management Systems (Pavement & Safety)**Pavement Management**

- Data collected/updated for approximately 100 miles of regional roads;
- A yearly Regional Report will be developed.

Regional Safety Review

- Safety analyses will be conducted at the Route 70 & Old Union Turnpike Roundabout in Lancaster as part of a Before and After Safety Performance Analysis;
- Road Safety Audits (RSAs) were also conducted at the following locations:
 - Lunenburg Road (Route 70) at Main Street (Route 117) in Lancaster;
 - John Fitch Highway at North Street and Pearl Street in Fitchburg;
 - Westminster Street at Ashburnham Street in Fitchburg;
 - Westminster Street at Simonds Road in Fitchburg, and;
 - Route 12 at Nelson Street and at Lindell Avenue and Hamilton Street in Leominster.

Task 2.52 Sidewalk Inventory & Pedestrian/Bicycle Connections

- Maps were created of the existing MART fixed bus routes in Fitchburg and Leominster with a 1/4-mile buffer along the routes;
- An inventory and map of the sidewalk conditions within the buffer was developed;
- A final analysis of sidewalk gaps and prioritized needs will be conducted.

Task 2.72 Stormwater Data Development Program

- Various support efforts were provided to interested communities related to data collection utilizing the MRPC developed app.

Task 3.22 FAST ACT Performance Measures

- A Performance Measures “Dashboard” was developed to assist in monitoring regional performance measures as outlined in the 2016 Montachusett Regional Transportation Plan

Task 3.32 Route 2 Before and After Safety Performance Analysis

- A review of the safety analysis and mitigation measures implemented as part of the Route 2 Safety Study in Athol and Phillipston was conducted;
- Crash data for the latest three-year period was obtained from the MassDOT crash database;
- A safety analysis was conducted based upon Route 2 from Athol to Phillipston;
- The draft Before and After Safety Performance Analysis study is expected by September 2017.

Task 3.52 Shirley Railroad Crossing Review and Analysis

- A local study review committee was comprised to provide input related to local issues;
- Local data has been or is under development to establish problem areas and conflicts;
- The draft study is expected by September 2017.

Task 3.62 Community Trail Brochure

- Local trail brochures were created for Lancaster and Fitchburg.

Task 4.42 Identification of Fixed Route Bus Stop Locations

- A literature review regarding best practices for bus stop locations was conducted;
- Additional field work was conducted regarding passenger boarding/alighting locations along each of the identified bus routes;
- Analysis of the data was conducted using the GIS to determine where bus stops should be placed based on demand and guidance derived from the literature reviewed;
- A report with maps and charts of existing and proposed bus stops for each bus route was compiled.

Task 4.52 Ridership Survey Development

- A review of an existing rider survey from the MBTA was conducted to help provide guidance related to questions, layout, etc.;
- Additional questions were developed and compiled related to local issues for the survey;
- Locations were reviewed and identified for distribution in Fitchburg, Leominster, and Gardner for the survey;
- Collection methods were also reviewed for analysis purposes.

UPWP DISTRIBUTION OF STUDIES AND TASKS

MassDOT has requested MPO's to include a geographic and social equity analysis of past and current tasks undertaken in the UPWP. Listed below are tasks from the past five UPWPs as well as tasks in this 2017–18 UPWP. The tasks identified for this analysis were limited to specific reports or studies attributable to a community or group of communities. Some tasks involve work or analysis that covers the entire region as a whole. The identified tasks were then mapped versus identified Environmental Justice and/or Title VI populations. Maps can be found in the appendix of this document. Environmental Justice and Title VI populations are defined as indicated in the tables below.

Environmental Justice Block Groups
1. Block group whose annual median household income is equal to or less than 65 percent (%) of the statewide median (\$62,072 in 2010); or
2. Twenty-five percent (25%) or more of the residents identifying as minority; or
3. Twenty-five percent (25%) or more of the households having no one over the age of 14 who speaks English only or very well - Limited English Proficiency (LEP).

FTA Title VI Communities
1. <u>Minority</u> (% of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average of 20.51%) - Shirley, Leominster, Lancaster, Fitchburg, Clinton and Ayer
2. <u>Low Income</u> (% Estimated Below Poverty Level that is higher than the regional average of 10.49%) - Athol, Ayer, Fitchburg, Gardner, Shirley and Templeton

FHWA Title VI Communities
1. <u>Elderly</u> (% of Total Population > 65 that is higher than the regional average of 12.58%) – Athol, Clinton, Gardner, Leominster, Lunenburg, Petersham, Sterling, and Templeton
2. <u>Individuals with Disabilities</u> (% of population with a disability that is higher than the regional average of 12.12%) – Athol, Ayer, Fitchburg, Gardner, Leominster, Petersham, and Royalston
3. <u>Minority</u> (% of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average of 20.51%) - Shirley, Leominster, Lancaster, Fitchburg, Clinton and Ayer
4. <u>Foreign Born</u> (% of population that is Foreign Born and is higher than the regional average of 8.15%) – Ayer, Clinton, Fitchburg, Gardner, Harvard, Leominster and Shirley
5. <u>Language</u> (% of Population Spoken Language Other than English that is higher than the regional average of 13.70%) – Clinton, Fitchburg, Harvard, Leominster, and Shirley

Five Year Task Review						
UPWP Year	Community	Description	Funding	Within EJ Population	Within Title VI Population	
					FHWA	FTA
2012 - 2013	Lancaster	Route 117 Corridor Profile	\$33,000		X	X
2012 - 2013	Fitchburg, Leominster, Shirley, Ayer	Bike and Ped Access to Commuter Rail in the Region	\$43,000	X	X	X
2013 - 2014	Fitchburg, Sterling	Traffic Analysis Studies	\$33,500		X	X
2013 - 2014	Fitchburg, Leominster, Shirley, Ayer	Roadway Connections to Commuter Rail	\$54,250	X	X	X
2013 - 2014	Ayer	Street Light Analysis	\$14,000	X	X	X
2014 - 2015	Harvard	Town Center Operational Study	\$25,000		X	
2014 - 2015	Lancaster	Local Complete Streets Review and Analysis	\$25,000	X	X	X
2015 - 2016	Shirley	Shirley Safety Study	\$36,750		X	X
2016 - 2017	Athol	Route 2 at South Athol Road Interchange Study	\$45,000	X	X	X
2016 - 2017	Athol, Phillipston	Route 2 Before and After Safety Analysis	\$40,500	X	X	X
2016 - 2017	Shirley	Shirley Railroad Crossing Review and Analysis	\$35,500	X	X	X
2017-2018	Fitchburg, Leominster	Sidewalk Inventory & Bicycle/Pedestrian Connections	\$26,500	X	X	X
2017-2018	Athol	South Athol Road/Route 2 Interchange Analysis	\$39,500	X	X	X
2017-2018	*To Be Determined*	Climate Change Program	\$36,000	TBD	TBD	TBD
2017-2018	*To Be Determined*	Local ADA Transition Plan Development	\$33,500	TBD	TBD	TBD
2017-2018	Fitchburg, Leominster, Gardner	Coordinated Transit Plan Update	\$31,250	X	X	X
2017-2018	Fitchburg, Leominster, Gardner	Ridership Survey Distribution	\$15,750	X	X	X

Five Year Task Review (cont.)						
UPWP Year	Community	Description	Funding	Within EJ Population	Within Title VI Population	
					FHWA	FTA
Annually	Regionwide (All 22 MRPC Communities)	Pavement Management System	Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Traffic Count Database	Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Regional Trail Database	Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Regional Crash Database	Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Freight Corridor Identification & Screening	Varies	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Regional Development Initiative	\$19,500	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Regional Transportation Needs Assessment	\$32,500	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Regional Bike & Ped Trail Update	\$23,000	X	X	X

A review of the work tasks identified over the past five-year period, i.e. from FY 2013 to FY 2018, shows:

- Of the 14 identified FHWA Title VI communities, community specific tasks were conducted in 8, or 57%, of those municipalities.
- Of the 9 identified FTA Title VI communities, community specific tasks were conducted in 6, or 67%, of those municipalities.
- Identified Title VI communities for both FHWA and FTA that lacked a community specific work task were Clinton, Gardner and Templeton.
- FHWA Title VI only communities that lacked a community specific work task include the three mentioned above plus Lunenburg, Petersham and Royalston.

An examination of Environmental Justice (EJ) populations as defined above, identifies 8 communities in the Montachusett Region that contain at least one or more of the various EJ populations. Again, over the previous five-year period, the following can be determined:

- Of the five communities, Athol, Clinton, Fitchburg, Gardner and Leominster, with segments of the population defined as low income, three, or 60%, had specific work tasks connected to them.
- Of the six communities, Clinton, Fitchburg, Harvard, Lancaster, Leominster, Shirley, containing population segments meeting the minority definition, five, or 83%, had specific work tasks.
- As with the above Title VI analysis, the communities of Clinton and Gardner did not have specific tasks assigned to them.

It should be noted that several tasks identified over the past five work program years, involved all 22 communities of the Montachusett Region and would likely entail some level of work in all of these identified communities.

Based upon this analysis and review, it would appear that the Montachusett MPO is making an effort to address transportation planning issues in Title VI and EJ communities in the Region. However, future efforts should focus on the communities of Clinton, Gardner, Lunenburg, Petersham, Royalston and Templeton. In particular, Petersham, Royalston and Templeton should be prioritized based upon past work efforts.

AMENDMENT AND ADJUSTMENT PROCEDURES FOR THE UPWP

All 3C documents (TIP, LRTP, UPWP, PPP, etc.) endorsed by the MPO must follow a standardized procedure regarding amendments and/or administrative adjustments to the document. The procedures must also be clearly outlined within the documents themselves. Within the UPWP, the conditions that identify and constitute what is considered an administrative adjustment or an amendment is as follows:

Administrative Adjustment

- Modification of budget funds
- Modification to project scopes

UPWP Amendment

- Addition or deletion of UPWP task(s)

All proposed adjustments must be approved by a vote of the MPO and approval by the Office of Transportation Planning (OTP) at MassDOT. Amendments must be released for 21-Day public comment period (or shorter if deemed necessary as outlined in the Public Participation Plan (PPP) for the MMPO) prior to endorsement by the MPO.

Additionally, the following must be adhered to for the Submission of a Budget Reallocation Request:

- A standard Budget Reallocation Request form must be submitted to MassDOT Office of Transportation Planning (OTP) with all fields filled out and with clear indication that the MPO was consulted prior to submission. Any and all back up documentation must be submitted, including the UPWP description of the task(s) affected, the original budget, the revised budget, and justification for the request.

SOURCES FOR THE MONTACHUSETT UPWP

FHWA allocates Metropolitan Planning Funds (PL) to MassDOT who in turn distributes those funds to the state's regional planning agencies based upon an agreed apportionment formula. As part of this process, each RPA enters into a multi-year "3C" (Continuing, Cooperative and Comprehensive) transportation planning contract. Fiscal years for PL funds follow federal fiscal years, i.e. October 1 to September 30.

FTA also distributes funds to MassDOT for allocation to RPA's as Section 5303 monies for the conduct of transit planning activities. Section 5303 funds are used for planning and technical studies related to transit. Unless otherwise noted, FTA funds follow federal fiscal year time frames.

Program years described in this UPWP therefore are as follows:

<u>Funding Source</u>	<u>Program Year</u>
FHWA/MassDOT	FFY 2018 October 1, 2017 - September 30, 2018
FTA/Section 5303	FFY 2018 October 1, 2017 - September 30, 2018

STATE AND FEDERAL POLICIES AND PROGRAMS

The FAST Act and Planning Factors

On December 4, 2015, President Obama signed into law the new Federal Surface Transportation Authorization known as Fixing America's Surface Transportation (FAST) Act. The FAST Act "largely maintains current structures and funding shares between highways and transit" and "makes changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance critical freight projects" (source: U. S. DOT website). The FAST Act retains most of the planning requirements of prior federal regulations, i.e. Moving

Ahead for Progress in the 21st Century (MAP-21) and the Safe Accountable Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The FAST Act did add two additional factors to the eight planning factors for both metro and statewide planning identified in MAP-21:

- 1. Economic Vitality** – Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- 2. Safety** – Increase the safety of the transportation system for motorized and nonmotorized users;
- 3. Security** – Increase the ability of the transportation system to support homeland security and to safeguard the personal security of motorized and non-motorized users;
- 4. Mobility** – Increase the accessibility and mobility of people and freight;
- 5. Environment** – Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- 6. System Integration** – Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- 7. System Management** – Promote efficient system management and operation;
- 8. System Preservation** – Emphasize preservation of the existing transportation system.
- 9. Reliability** - Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- 10. Travel and Tourism** - Enhance travel and tourism.

These ten (10) planning factors must be considered by MPOs in their UPWP's. This UPWP seeks to incorporate these planning factors through the various tasks identified.

		Planning Factors									
UPWP Tasks		Economic Vitality	Safety	Security	Mobility	Environment	System Integration	System Management	System Preservation	Reliability	Travel and Tourism
1.53	EJ/Title VI				X	X				X	
2.13	Reg Demo & Model	X			X		X				X
2.23	GIS	X	X			X		X	X		X
2.33	Data Collection	X	X						X	X	
2.43	Pavement Mangmnt		X	X	X		X	X	X	X	X
2.53	Sidewalk Bike/Ped	X	X		X	X	X	X	X		X
2.63	Freight Corridor ID	X	X		X		X	X	X	X	
2.73	Reg Development Initiat	X			X	X	X			X	X
3.13	S Athol Rd/Rt 2 Interch	X	X	X	X	X	X				X
3.23	Perform Measures RTP	X			X			X	X	X	
3.33	Climate Change Prog.					X				X	
3.53	ADA Transition Plans	X	X	X	X	X	X		X		X
3.63	Trans Needs Assessmnt	X			X	X	X	X	X	X	X
3.73	Reg Trail Update	X			X	X	X	X			X
4.43	Coordinated Transit Plan				X		X	X	X	X	X
4.53	Ridership Survey Dist	X			X		X	X	X	X	X

GreenDOT

GreenDOT is the Massachusetts Department of Transportation's sustainability initiative. It is designed to support the implementation of the following state laws.

- Climate Protection and Green Economy Act (Mass. Gen. L. c. 21N)
- Green Communities Act (Chapter 169 of the Acts of 2008)

- Healthy Transportation Compact (section 33 of Chapter 25 of the Acts of 2009)
- Leading by Example (Executive Order of Governor Patrick, no. 488)
- MassDOT's youMove Massachusetts planning initiative
- The "Complete Streets" design standards of the 2006 MassDOT Highway Division Project Development and Design Guide, as amended

The GreenDOT initiative incorporates three main goals:

1. Reduce greenhouse gas (GHG) emissions
2. Promote the healthy transportation modes of walking, bicycling, and public transit
3. Support smart growth development

Through the GreenDOT policy, MassDOT will seek to "promote sustainable economic development, protect the natural environment, and enhance the quality of life for all the Commonwealth's residents and visitors."

As part of implementation plan for GreenDOT, in October 2012 MassDOT announced a "Mode Shift" goal designed to reduce the number of individuals travelling alone by automobile. The Mode Shift goals are measured in Personal Miles Traveled (PMT) and seek to triple the amount of walking, bicycling and public transit use in the Commonwealth between 2010 and 2030. For further information on Mode Shift Goals, refer to the MassDOT website (<http://www.massdot.state.ma.us/Main.aspx>).

weMove Massachusetts

MassDOT released [weMove Massachusetts \(WMM\): Planning for Performance](#), the Commonwealth of Massachusetts' 2040 Long-Range Transportation Plan (LRTP) in May of 2014. This plan includes seven major components:

1. Transportation Reform - emphasis on customers, innovation, accountability, performance management, efficiency, stewardship and stronger collaboration across transportation divisions;
2. Data and Analysis - critical to sound decision making;
3. Transportation System Needs Identification– to help choose the right transportation investments;
4. youMove Massachusetts Themes - ten value statements that capture the diverse values users;
5. Customer and Stakeholder Engagement– incorporate the priorities of customers and stakeholders;
6. Statewide Transportation Plans– implement modal plans;
7. Statewide Priorities and Policies– ensure accountability.

Source: <http://www.massdot.state.ma.us/wemove/Home.aspx>

The policies of the Commonwealth will be reviewed, considered and incorporated in the planning studies developed as part of the work tasks outlined in this UPWP. Recommendations derived from these studies will be consistent with state policies.

Healthy Transportation Policy Directive

On September 20, 2013, MassDOT announced the Healthy Transportation Policy Directive designed to increase bicycling, transit and walking options. The directive is intended to promote multimodal access for users of the transportation networks and systems.

The Healthy Transportation Directive builds upon the goals established under MassDOT's GreenDOT Implementation Plan and mode shift goal. The Directive requires all MassDOT Districts to review all projects under design to "ensure they are consistent with ...goals."

Elements included in the Directive are as follows:

- All MassDOT facilities will consider adjacent land uses and be designed to include wider sidewalks, landscaping, crossing opportunities and other features to enhance healthy transportation options;
- Reviews will be conducted of cluster sites where incidents have occurred with healthy transportation users;
- MassDOT will develop a guide to assist communities proposing Shared Use Paths on or along rail beds in order to accelerate the path design process.

Additional information on the Healthy Transportation Policy Directive and MassDOT's GreenDOT comprehensive environmental responsibility and sustainability initiative can be viewed at <http://www.massdot.state.ma.us/GreenDOT.aspx>.

Coordination in the Montachusett UPWP

The policies and goals of the Commonwealth, such as *GreenDOT* and *Mode Shift*, will be reviewed, considered and incorporated in the planning studies developed as part of the work tasks outlined in this UPWP, i.e. 1.43 Development of TIP, 2.13 Regional Demographics & Model, 2.53 Sidewalk Inventory & Bicycle/Pedestrian Connections, 2.73 Regional Development Initiative, 3.13 South Athol Road/Route 2 Interchange Analysis, 3.33 Climate Change Program, 3.53 Local ADA Transition Plan Development, 3.63 Regional Transportation needs Assessment, 4.43 Coordinated Transit Plan Update and 4.53 Ridership Survey Distribution. Recommendations derived from these studies will be consistent with state policies.

1.0

MANAGEMENT AND SUPPORT

Objective:

To assist, support, and provide the capability to maintain an open, comprehensive, cooperative, and continuing (3C) transportation/air quality planning and programming process at all levels of government; in conformance with applicable Federal and State requirements and guidelines, as described in the Memorandum of Understanding, and consistent with the DOT/EPA agreement. The task will include the presentation and preparation of transportation related planning activities, including those related to the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP), the Regional Transportation Plan (RTP) and other major documents, to various committees and groups; analysis and review of related documents and studies; attendance at federal and state transportation related workshops and meetings; and coordination and liaison with federal, state and local officials.

This task will provide continued technical assistance and liaison with various coalitions/task forces including: the Montachusett Regional Trail Coalition (MRTC), the Montachusett Regional Transit Authority (MART), the Montachusett Regional Emergency Planning Committee (MREPC), the Community Health Network Area 9 (CHNA 9), the Fitchburg Line Working Group and the Montachusett Joint Transportation Committee (MJTC).

A new activity is being added for this UPWP. There is a federal initiative to combine regional plans such as CEDS, TDPs and RTPs into “unified” or “combined” state plans (Plan) as described in the Federal Workforce Innovation and Opportunity Act (WIOA) of 2016. This new technical assistance and liaison activity will investigate ways to incorporate the MRPC RTP into the Plan and set the groundwork for the next RTP.

The Montachusett Regional Trail Coalition was established in early 2012 through the joint efforts of the Nashua River Watershed Association, local trail advocates and the MRPC to “advance the development of diverse high quality trails and greenways for all people.”

The cities of Fitchburg, Leominster and the town of Lunenburg have formed the Montachusett Regional Emergency Planning Committee (MREPC) to address emergency management issues for the three communities. Support services are provided to continue to work with the MREPC on evacuation and security planning.

The Community Health Network of North Central Massachusetts (CHNA 9) is one of 17 CHNAs across Massachusetts, created by the Department of Public Health in 1992. CHNAs are an initiative to improve health through local collaboration. CHNA 9 is a partnership between the Massachusetts Department of Public Health, the Central MA Center for Healthy Communities, residents, hospitals, local service agencies, schools, faith communities, businesses, boards of health, municipalities, and other concerned citizens working together to: identify the health needs of member communities, find ways to address those needs and improve a broad scope of health in these communities. The Community Health Improvement Plan (CHIP) includes Transportation and Access as one of four priority areas.

The Fitchburg Line Working Group is a group of local officials that has worked with consultants and the MA Bay Transportation Authority (MBTA) to examine options for improving commuter rail service on the Fitchburg Line. The special advisory commission was established through state legislation with the purpose of “promoting and facilitating inter-local and inter-regional cooperation and to investigate, propose, evaluate and vote on recommendations to,” (MassDOT) “on the need for transportation improvements, enhancements, and alternatives for the municipalities and regions serviced by the Fitchburg MBTA commuter rail line.” The Advisory Commission is comprised of 24 members including the MRPC.

The MJTC is a sub-committee of the MRPC that focuses on transportation and transit issues. In addition to acting as a sounding board for the development of all “3C” documents, the MJTC serves as a public outreach forum to solicit input from all members of the public.

Additionally, the MRPC will continue to work with MassDOT related to the implementation of regulations and requirements related to the federal transportation authorization.

Previous Work:

During FY 2016-2017, the Montachusett Regional Planning Commission (MPO) staff:

- Administered a viable 3C transportation planning process under the directives of the MPO, as outlined in the previous Unified Planning Work Program (UPWP);
- Scheduled, conducted and maintained an active citizen-participation process including private sector participation through the Montachusett Joint Transportation Committee (MJTC);
- Scheduled, conducted and maintained the operation of the Montachusett Metropolitan Planning Organization (MMPO);
- Coordinated the transportation planning program with local community planning and engineering departments;
- Maintained liaison and coordination with federal and state agencies;
- Administer all requirements and activities of the 3C planning contract.
- South Athol Road and Route 2 Studies Advisory Group, 2016 – Ongoing;
- CHNA 9, 2017- Ongoing;
- Harvard Town Center Operations Study Task Force, 2015-2016;
- Worcester County Highway Association, 2014 – Ongoing;
- Montachusett Regional Trail Coalition, 2012 – Ongoing;
- Montachusett Emergency Regional Planning Committee, 2006- Ongoing;

Methodology:

General 3C Support:

1. Provide administrative and technical support to the 3C process such as:
 - a. Provide liaison and short term planning assistance to all communities on transportation planning matters.
 - b. Review Federal and State transportation programs and regulations as required or necessary.
2. Administer the UPWP, 3C Contract, FTA/The Office of Transportation Planning Technical Studies and other transportation related grants.
3. Provide for and support public participation and private enterprise involvement in the 3C Process, FTA and Air Quality Programs.
4. Participation in informational programs on transportation, air quality, hazardous waste, energy conservation and accessibility planning.
5. Coordinate work with agencies involved in the 3C Contract, FTA and Air Quality Planning Programs.
6. Review MassDOT "084" Forms which affect highway capacity, speed, or VMT as part of the MPO's annual Air Quality Consistency Review.
7. Provide for participation of staff in educational development programs and conferences with concurrence with the Office of Transportation Planning and other agencies as needed.
8. Review and comment on traffic studies submitted to member municipalities by developers under the MEPA process or as needed/requested.
9. Insure that transportation/air quality decisions are consistent with regional policies, goals, objectives, and the State Implementation Plan (SIP).

10. Distribute for endorsement all necessary certification documents; maintain all MPO documentation records and files, and act as the general secretariat for the MPO in the Montachusett Region.
11. Work with and assist MassDOT and OTP with the implementation of rules and regulations related to MAP-21 and the FAST Act.
12. Coordinate work with state and regional agencies involved in the unified or combined Massachusetts state plan of the Federal WIOA.

Montachusett Regional Trail Coalition

- Continue participation with the Trail Coalition;
- Coordinate and liaison with the Nashua River Watershed Association and local trail advocates;
- Provide feedback and support related to trail development and implementation through the TIP process as well as other potential funding sources.

Fitchburg Line Working Group:

- Continue participation on and liaison with the working group;
- Continue interaction and work with local officials, MBTA and Devens Enterprise Commission to review information, analysis and recommendations regarding study as developed by consultant, and continue process for development of projects for funding through the TIP, etc.

Montachusett Regional Emergency Planning Committee

- Continue participation on and liaison with MREPC;
- Provide feedback and support services related to evacuation and emergency planning issues;
- Coordinate with local Regional Transit Authority on emergency issues and agreements.

Montachusett Joint Transportation Committee

- Continue scheduling, coordination, and participation of and with the MJTC;
- Provide support services related to meetings and issues raised by the MJTC;
- Coordinate development of federal certification documents with MJTC.

Product:

The maintenance and certification of a viable 3C transportation planning process.

Montachusett Regional Trail Coalition:

- Meeting and event support as needed.

Fitchburg Line Working Group:

- Project list for the Fitchburg Commuter Rail Line within the Montachusett Region for use as input to the MBTA's Capital Improvement Plan and where appropriate.

Montachusett Regional Emergency Planning Committee:

- Support maps and data as requested and where appropriate.

Montachusett Joint Transportation Committee:

- Meeting support as needed.
- Coordination with federal certification documents.

Schedule:

Management and support activities on a continuing basis throughout the program year.

Task Force and Organization activities to be carried out throughout the program year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Support Activities												
Public Input												

Task 1.13

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$49,998	\$12,250	\$6,000	\$1,500	\$68,748

Objective:

To develop and obtain MPO endorsement of an annual Unified Planning Work Program (UPWP) that provides a description of the overall transportation/air quality planning activities, ongoing and anticipated in the region, including funding sources and agency responsibilities. Distribution and notification of documents, drafts and applicable items will follow and be consistent with the Montachusett Public Participation Plan (PPP).

Previous Work:

Previous Unified Planning Work Programs and other Federal and State grant applications (including Prospectus) produced annually.

Methodology:

In conformance with applicable Federal and State guidelines, prepare and continually maintain a Unified Planning Work Program that describes all transportation-related planning activities anticipated within the Region during the next or upcoming program year regardless of funding sources. The UPWP will include tasks and budget information based upon federal and state guidance.

Maintain the current UPWP during the program year and revise, adjust or amend the UPWP as needed. Adjustments and amendments will be based upon criteria previously identified in this document. Any and all public comment periods will follow procedures outlined in the current Montachusett PPP.

Products:

1. Annual Unified Planning Work Program endorsed by the MPO.
2. Amendments, as necessary, endorsed by the MPO.

Schedule:

Update and endorsed annually during the middle Segment of each Program Year. Development schedule is designed to coordinate with the state timeline for the Capital Investment Plan (CIP). Meetings to occur throughout the process from December 2017 to May/June 2018 time period. Draft documents prepared March to May 2018. MPO endorsement to be sought no later than June 2018.

Amendments are prepared and endorsed as necessary.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Start												
Public Input												
Draft												
MPO Endorsement												

Task 1.23

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$13,600	\$3,400	\$4,000	\$1,000	\$22,000

Objective:

To develop and obtain MPO endorsement of an annual Unified Planning Work Program (UPWP) that provides a description of the overall transportation/air quality planning activities, ongoing and anticipated in the region, including funding sources and agency responsibilities. Distribution and notification of documents, drafts and applicable items will follow and be consistent with the Montachusett Public Participation Plan (PPP).

Previous Work:

Previous Unified Planning Work Programs and other Federal and State grant applications (including Prospectus) produced annually.

Methodology:

In conformance with applicable Federal and State guidelines, prepare and continually maintain a Unified Planning Work Program that describes all transportation-related planning activities anticipated within the Region during the next or upcoming program year regardless of funding sources. The UPWP will include tasks and budget information based upon federal and state guidance.

Maintain the current UPWP during the program year and revise, adjust or amend the UPWP as needed. Adjustments and amendments will be based upon criteria previously identified in this document. Any and all public comment periods will follow procedures outlined in the current Montachusett PPP.

Products:

1. Annual Unified Planning Work Program endorsed by the MPO.
2. Amendments, as necessary, endorsed by the MPO.

Schedule:

Update and endorsed annually during the middle Segment of each Program Year. Development schedule is designed to coordinate with the state timeline for the Capital Investment Plan (CIP). Meetings to occur throughout the process from December 2017 to May/June 2018 time period. Draft documents prepared March to May 2018. MPO endorsement to be sought no later than June 2018.

Amendments are prepared and endorsed as necessary.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Start												
Public Input												
Draft												
MPO Endorsement												

Task 1.23

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$13,600	\$3,400	\$3,500	\$875	\$21,375

Objective:

Under this task the Montachusett MPO will continue to support, review and update the Public Participation Plan (PPP) developed for the UPWP, TIP and Regional Transportation Plan (RTP). These processes outline the public outreach procedures to be followed by the MPO in developing and amending the Region's RTP, TIP, UPWP and other major documents as required. It is designed to ensure that all interested public and private agencies, organizations, including non-profits, and citizens have equal access to all transportation related policies, projects, and decisions made within the region. The encouragement of meaningful participation of local individuals in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process and the Public Participation Program.

An updated and revised Montachusett PPP was developed and endorsed in May 2016 in accordance with federal and state guidelines and regulations. In addition, input from the MassDOT Office of Diversity and Civil Rights (ODCR) related to Title VI was incorporated as necessary. Utilizing the state's PPP as a model, the updated PPP was subject to a 45 day public review period. The PPP will continue to be reviewed and any subsequent revision or amendment will be implemented as deemed appropriate. Any action related to the PPP will seek endorsement by the MPO. Coordination with MassDOT's ODCR will also continue to be maintained and encouraged to ensure a viable and workable PPP.

In addition, staff will continue to monitor, support and encourage public participation through the MJTC, the Montachusett MPO and the MRPC. Staff will continue to prepare for and attend public meetings, seek to identify underserved and underrepresented groups, populations and organizations, identify methods to improve participation in the MJTC, MPO and MRPC and examine new and innovated methods to disseminate materials in order to meet environmental justice, Title VI and other federal and state requirements.

The MRPC website went through a significant update and redesign in spring 2013. This update has allowed staff to better maintain the site and by extension improve the experience and usage by the general public. Within the last few year, features related to online translation of the website have been incorporated across all webpages. Continued refinements to the MRPC web page (www.mrpc.org) will continue to be undertaken. Efforts will continue to examine ways to make the MRPC website more accessible and easier to navigate for the public especially in relation to Title VI and Limited English Proficiency (LEP) needs or requirements.

Previous Work:

- Montachusett Public Participation Plan – May 2016.
- Title VI Annual Report – July 2015
- MRPC website redesign – 2013 and Ongoing
- Montachusett Public Participation Plan Amendment – April 2010
- Montachusett Public Participation Plan – June 2007

Methodology:

As part of the continued development of the MRPC website:

1. Prepare, publish, update and enhance the MRPC web page with information that indicates the status of transportation activities and programs in the region.
2. Continue refinements to the site in order to meet Title VI and LEP needs and requirements to better serve all the interested public.
3. When appropriate, hard copies of information contained on the web site will be distributed to the MPO, the MJTC, local planning boards, selectmen and the general public.

As part of the Public Participation Program/Plan;

1. Conduct review of state Public Participation Program and related Title VI input/comments from ODCR.

2. Identify elements of the PPP that need refinement and/or correction.
3. Update the Public Participation Program that details efforts to involve citizens in the transportation planning process in accordance with FHWA/FTA Planning Regulations as related to MAP-21 and any/all Title VI requirements.
 - a. Provide a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions and supports early and continuing public involvement in developing UPWP's, Regional Transportation Plans, and TIP's and meets the eleven requirements and criteria specified in the regulations.
 - b. Continue efforts to broaden participation to include environmental, public health, elderly and disabled and other public and private interest groups for air quality and accessibility planning.
 - c. Continue efforts to address issues related to Title VI and public outreach and involvement to those identified populations.
4. Identify Innovative Public Participation Techniques and Processes: Based on the update process, staff will attempt to identify innovative public participation techniques and programs that will enhance public participation.
5. Identify Underserved/Underrepresented Groups: Under the Final Rule on Metropolitan Planning, MPO's are required to reach out to those groups who have been traditionally underserved in the provision of transportation services. MRPC staff will identify these groups as well as others who, while not underserved, are not participating in the transportation planning process and attempt to get them more involved.
6. Provide for Open Review of the Implementation of this Process: It is very likely that the Public Participation Program will require continued revision and refinement. MRPC will make sure that interested parties and the general public are involved in developing new and/or additional outreach procedures and will have ample opportunity to voice their opinions on these changes once proposed.
7. Implement Public Participation Plan in All Aspects of MPO Planning: In addition to its use in developing/amending the RTP, TIP, and UPWP, the Public Participation Plan will be used, where appropriate, in other aspects of the MPO planning process.
8. Present Transportation Plans and programs to the public for appropriate action.
9. Utilize MRPC internet web page to promote and solicit public input and involvement in all planning aspects. Actively promote availability of web page.
10. Individuals who need a reasonable accommodation to fully participate in MPO sponsored activities and meetings, such as a tape of the draft document to be considered, a sign interpreter, large print materials, transportation, etc. are encouraged to contact the MRPC office at (978) 345-7376 for assistance.
11. Maintain an ongoing review of the PPP to continue to address issues related to Environmental Justice and Title VI compliance. Update/change the PPP as needed.
12. Continue review of Limited English Proficiency Plan (LEP) and its relation to the PPP. Update LEP and PPP as needed to affectively address MAP-21 and FAST Act rules and regulations.
13. The PPP, where appropriate, seeks to address the needs of individuals with limited English-speaking proficiency as well as all Title VI populations. In addition, the PPP seeks to recognize where appropriate that the development of Regional Transportation Plans will include consultations, as appropriate, with state and local officials responsible for Land Use Management, Natural Resources, Environmental Protection, Conservation, and Historic Preservation.

Product:

- Revise/update the PPP to address Title VI and other issues identified and highlighted by MassDOT's ODCR as well as through federal and state rules and regulations.
- Updated Web Page; Print copies as needed.
- Continued maintenance of a viable Public Participation Plan for the TIP, RTP, UPWP and where appropriate, other aspects of MPO planning.

Schedule:

To be carried out throughout the program year.

Update/revision to the PPP to be completed and endorsed by the MPO as needed.

Website to be updated on a continuing basis as information developed.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Web Revisions												
PPP Review												

Task 1.33

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$22,800	\$5,700			\$28,500

Objective:

To develop and maintain a financially constrained staged multi-year program of transportation/air quality improvement projects that is consistent with the region's Transportation Plan, the State Implementation Plan, EPA's Air Quality Conformity Regulations and FHWA/FTA Planning Regulations; and to conduct, on an as needed basis, amendments and administrative adjustments to the TIP regarding new project selection, air quality reviews, etc. based upon procedures outlined within the TIP. Amendments and adjustments would include development of draft and final documents, public and MPO notification, etc. Staff developed in 2012-2013, a revised Transportation Evaluation Criteria (TEC) scoring mechanism based upon MJTC and MPO review and input. The TEC continues to be reviewed and updated as new MAP-21 and FAST Act regulations are promulgated as related to performance measures. Various performance measures developed as part of the 2016 Regional Transportation Plan will be evaluated for inclusion in the TEC analysis.

Distribution and notification of documents, drafts and adjustments/amendments will follow and be consistent with the Montachusett Public Participation Plan (PPP) adopted in 2016.

In addition, staff will conduct the process for MPO Subregions to select a Representative and Alternate based upon the guidelines established in the MPO Memorandum of Understanding (MOU).

Previous Work:

- Prior TIP's and Amendments developed on an annual basis.
- Regional Performance Measures and Goals through the 2016 Regional Transportation Plan - 2015
- Transportation Evaluation Criteria (TEC) Revision for the Montachusett Region – 2012-2013.
- MAP-21 Regionally developed Performance Measures – 2015/2016

Methodology:

1. GENERAL

- A. The TIP is a staged, multi-year, Intermodal program of transportation projects which are consistent with the regional transportation plan. It is a management and project tracking tool that is used to monitor the progress in implementing the Regional Transportation Plan;
- B. It seeks to insure early involvement of key stakeholders and citizens through adherence with the Public Participation Plan prepared under the 3C Task;
- C. The TIP includes sections on:
 1. Description of funding categories and amounts of Federal funds proposed to be obligated during each program year;
 2. Previously funded projects and programs from the last TIP year;
 3. A description of the criteria and Project Selection Process for prioritizing projects;
 4. Air quality significance and relationship of the TIP to the State Implementation Plan (SIP);
 5. A financial plan that compares revenue needs to revenue sources for highway and transit programs and identifies operating and maintenance costs for the existing transportation system. The MRPC recognizes the need to develop a financially constrained TIP and will work with all members of the MPO to ensure the development of such a document;
- D. The TIP utilizes a Transportation Evaluation Criteria in the review and prioritization process for identified projects. A continued review of the revised TEC will be conducted in order to ensure a regionally specific TEC. Performance Measures as developed during the development of the 2016 RTP and additional measures developed by federal and state officials according to MAP-21 and FAST Act requirements will be incorporated into the TEC as they come online.

- E. The TIP conducts a review and analysis where required to determine compliance and applicability to the Commonwealth's Global Warming Solutions Act. This includes an evaluation and tracking of Green House Gas (GHG) emissions and impacts of projects within the four years of the TIP.

2. DEVELOPMENT PROCESS OF THE FIVE-YEAR PROGRAM OF PROJECTS

- A. Update the list of all transit, highway, or air quality projects that are expected to require federal transportation funds for planning and engineering, construction or purchase during the federal fiscal years that the TIP is prepared for;
- B. Prepare a list of all regionally significant transportation projects or programs that require FHWA or FTA approval that are not using Federal transportation funds;
- C. For informational purposes list all regionally significant projects proposed to be funded with Federal funds other than from FHWA and FTA;
- D. For informational purposes list all regionally significant projects proposed to be funded with Non-Federal funds;
- E. The list of projects shall include:
 - 1. The official MassDOT identifying project title;
 - 2. Project description;
 - 3. Transportation Evaluation Criteria Score;
 - 4. Estimated total cost;
 - 5. The amount of Federal funds proposed to be obligated during each program year;
 - 6. Proposed source of Federal and non-Federal funds;
 - 7. Identification of the recipient/sub recipient and State and local agencies responsible for carrying out the project;
 - 8. Identification of those projects which will implement ADA plans.
- F. Project descriptions shall be of sufficient detail to permit air quality analysis in accordance with the U.S. EPA conformity requirements;
- G. The total costs of projects, seeking Federal funds, in each program year shall be in line with anticipated federal funds. Year of Expenditure (YOE) costs will be determined for projects contained within Years 2, 3, 4 and 5 for the TIP;
- H. The projects will be reviewed by staff of the MPO Staff, MassDOT Planning and MassDOT Highway Districts 2 and 3 based upon the procedures outlined in the Transportation Evaluation Criteria. Initial scores will be determined and reviewed by the MPO in order to establish the TIP;
- I. Projects will be reviewed and analyzed using MassDOT developed AQ spreadsheets in order to determine GHG impacts and/or reductions.

3. AIR QUALITY

Prepare all documentation necessary for an air quality consistency determination required by EPA's recent regulations of "Criteria and Procedures for Determining Conformity to State of Federal Implementation Plans of Transportation Plans, Programs, Projects Funded or Approved Under Title 23 U.S.C. of the Federal Transit Act".

- A. A review of the past year's accomplishments within the Transportation element of the SIP.
- B. The TIP is based upon a conforming Regional Transportation Plan (RTP) and is therefore a conforming document. As such a quantitative air quality analysis of all regionally significant projects will be conducted only as needed and on those projects not contained within the conforming RTP. Major air quality projects are defined as those that change vehicular speed, reduce VMT or affect travel delay; as promulgated and endorsed by the State Air Quality Task Force. This as needed analysis will include projects which require an Environmental Impact Study (EIS), Environmental Impact Report (EIR) or Finding of No Significant Impact (FONSI); and will utilize methodology endorsed by the State Air Quality Task Force. The analysis will be based on a network-based transportation demand model

which will be used to compare the action (build) alternatives to the baseline (no-build) alternative relative to air quality impacts.

- C. Prepare and review GHG emission impacts in order to assist in meeting requirements of the Commonwealth's Global Warming Solutions Act.

4. PUBLIC PARTICIPATION

- A. There will be reasonable opportunity for public comment in accordance with the Public Participation Plan developed and endorsed by the MPO in 2016;
- B. The proposed and approved TIP will be published or otherwise made readily available for information purposes.

5. CONSULTATION

Through the TIP development process, consultation with various state and local officials as well as other groups/organizations and stakeholders is required by applicable federal and state rules and regulations. Through meetings with MassDOT and the MJTC, as well as the procedures outlined in the Montachusett Public Participation Plan, notification will be made to a number of "agencies and officials responsible for other planning activities within the Metropolitan Planning Area (MPA) that are affected by transportation" of the development of the TIP. Further coordination and/or consultation will occur as early as possible and as needed and requested. All efforts will be documented within the TIP.

6. TIP APPROVAL

The above completed documents will be reviewed and endorsed by the MPO. The endorsed product will serve as the required air quality consistency documentation necessary for DOT (FHWA/FTA) and EPA conformity determination.

7. ADJUSTMENT/AMENDMENT/MODIFICATIONS

Amendments and Adjustments to the TIP will require MPO approval and action. Procedures outlined in the Montachusett Public Participation Plan will be followed.

8. SELF CERTIFICATION

During the development of the TIP and at the time of endorsement by the MPO, the MRPC will conduct an annual Self Certification Compliance. This will certify that the Comprehensive, Continuing, Cooperative Transportation Planning Process for identified fiscal year in the Montachusett Metropolitan Planning Organization is addressing major issues facing the region and is being conducted in accordance with all applicable requirements.

Additionally, a self-certification will be conducted related to the Global Warming Solutions Act Requirements that will indicate compliance with applicable requirements of State Regulation 310 CMR 60.05.

9. PERFORMANCE AND ECONOMIC MEASURES

When and where applicable, performance and economic measures will be examined so as to be used as part of TIP development and Transportation Evaluation Criteria process.

Product:

A MPO endorsed Transportation Improvement Program, including, Year 1, 2, 3, 4 and 5 elements, a ranking of the projects based upon the Transportation Evaluation Criteria process, a quantitative analysis of all transportation related emissions as a result of the implementation of the TIP and a demonstration that its

implementation is consistent with the SIP and meets EPA/DEP conformity criteria and disbursed in accordance with the latest distribution matrix.

Adjustments/amendments to the TIP as required. Amendments or administrative action based upon criteria outlined within the TIP.

The TIP and any adjustment or amendment will be a fiscally constrained document for each fiscal year covered.

Performance and economic measures based upon project types that can be used as part of evaluation criteria for TIP development.

Schedule:

The TIP will be submitted as required by MassDOT during the second/third quarter of the required Program year.

Draft document to be developed for public release and review in March 2018 to April 2018 time period.

Final and MPO Endorsed documents to be released in May 2018. Development schedule is designed to coordinate with the state timeline for the Capital Investment Plan (CIP). MPO endorsement to be sought no later than May 2018.

Amendments to the TIP are processed as needed.

Performance measures analysis ongoing throughout the year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
TIP Start												
Public Input												
Draft												
MPO Endorsement												

Task 1.43

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$40,000	\$10,000	\$6,000	\$1,500	\$57,500

Objective:

To continue to integrate the basic principles of Environmental Justice (EJ) and Title VI (compliance to the Civil Rights Act of 1964) into the 3C Transportation Planning Process. Attempts will continue to be made to expand upon and incorporate recommendations previously developed and agreed to by the MRPC. A recent revision of the Public Participation Plan (PPP) was completed in 2016 that sought to improve, encourage and expand participation and access in the transportation planning process by all area individuals. Issues related to Environmental Justice and its inclusion in local technical assistance reports, studies, etc. will continue to be reviewed to ensure the process contains no public involvement barriers to target populations. Methods to measure EJ efforts conducted through other studies/plans will be reviewed and compiled to allow for consistent “tracking” of regional efforts. The MRPC will continue efforts to meet Title VI requirements in accordance with state and federal policies. This includes the continued review and revision of the MPO Endorsed Limited English Proficiency Plan (LEP) as well as annual reports and updates to MassDOT regarding Title VI compliance and procedures. The MRPC will continue to work with the MassDOT Office of Diversity and Civil Rights (ODCR) towards the creation of a more robust Title VI program. Work efforts under this task will include continued working with MassDOT, ODCR, MassDOT’s Title VI Coordinator and the Massachusetts Office of Disability (MOD) to address areas identified by Federal Highway Administration (FHWA) and their incorporation into the planning process within the Montachusett Region. In addition, an equity analysis will be conducted for any 3C document that is developed.

Previous Work:

- Updated/Revised Public Participation Plan – May 2016
- Public Participation Plan & Amendment – 2007 & April 2010;
- 2016 Regional Transportation Plan;
- Montachusett Title VI Report – 2011, 2012; 2015
- Updated MRPC website – ongoing;
- Montachusett MPO Endorsed Limited English Proficiency Plan (LEP) – February 2013;
- MMPO Annual Title VI Report – December 2012.

Methodology:

- Continue to identify procedures and methods to encourage and improve involvement and participation of all groups in transportation planning process.
- Coordinate discussions and meetings with MassDOT, FHWA and MRPC regarding Title VI issues;
- Continue to review PPP in relation to EJ and Title VI issues as necessary.
- Compile and submit on an annual basis to MassDOT a Title VI Report related to efforts and activities undertaken to meet applicable requirements.
- Continue to review and revise the Montachusett LEP Access Plan to reflect latest federal requirements.
- Continue to work and coordinate with MassDOT Office of Diversity and Civil Rights, MassDOT’s Title VI Coordinator and the Massachusetts Office of Disability (MOD) to address FHWA Title VI issues and needs.
- Continue to conduct equity analysis for Title VI and EJ populations for developed 3C documents, ex. the TIP and UPWP.

Product:

- Technical assistance memorandum, reports and workshops as needed.
- Mailing lists of EJ and Title VI related groups and organizations.
- Reports on efforts as needed.
- Limited English Proficiency Plan Updates
- Website updates and refinements
- Annual Title VI report

- Equity analysis of benefits and burdens within developed 3C documents.

Schedule:

To be carried out during the program year. Annual Title VI reports prepared and submitted – As required

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Public Input												
Fed/State Coordination												

Task 1.53

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$38,000	\$9,500	\$3,000	\$750	\$51,250

2.0

DATA COLLECTION AND ANALYSIS FOR REGIONAL TRANSPORTATION PLANNING

Objective

To review, update and develop improved regional demographics:

- MPO staff will collect updated socioeconomic American Community Survey (ACS) at the block group, tract, and community level as it pertains to the travel demand model calibration process as well as other program initiatives. In addition, data from the Massachusetts Travel Survey (MTS) will be utilized for calibrating the regional travel demand model. The MTS was a large-scale effort that collected information on residents' travel patterns, preferences, and behavior in order to help build a fuller, more accurate picture of transportation needs. This data will be utilized to update trip generation rates within the travel demand model.

To review, update and develop improved regional population, household, and employment projections:

- MPO staff will continue to refine population projections produced in-house in recent years. These projections were produced for each of the individual communities within the region, as well as the region as a whole, using the Hamilton-Perry method, a similar method to the Cohort-Component method. The production of these population projections allows MPO staff to compare our results with results from other projection initiatives across the Commonwealth, as well as analyze potential future growth trends for the region as a whole. In addition, MPO staff will play an active role in the development of new population, household, and employment projections for the Commonwealth with MassDOT.

MPO staff will continue and expand regional modeling efforts:

- Existing modeling efforts will be continued. The transportation model (Model) will be updated for the Region for use with transportation plans/studies; for meeting federal requirements and air quality laws and regulations. The Model will also be utilized to support other planning activities within the Region. The Model allows the MRPC to complete the following minimum planning activities: to model existing traffic impacts to reveal congested roadways, to forecast impacts on traffic as a result of population and economic development, to estimate Vehicles Miles Traveled, to evaluate transportation alternatives as needed. Modeling efforts will be expanded into greenhouse gas (GHG) modeling of policy choices.

Previous Work:

During the previous program years, the following elements to the model have been accomplished:

- Updated demographic data
- Updated demographic projection data
- Model utilized for review of projection data as part of RTP development
- Conversion to TransCAD from TRIPS (completed)
- Build out analysis for MRPC communities (completed)

Methodology:**Regional Demographics**

MPO staff will seek to undertake the following:

- Review input data used to develop the regional demographics and demographic projections for updates
 - Review US Census websites for the most recent updates to Census and ACS information
 - Review the MA Executive Office of Labor and Workforce Development for the most recent updates
 - Review the Massachusetts Travel Survey data for the Region
 - Review other data sources as needed
 - Continue to construct development database of recent, current, or anticipated residential and commercial development projects in the Region
 - Update existing population, household, and employment profiles of Region municipalities as needed

Regional Demographics Projections

MPO staff will seek to undertake the following:

- Update regional population and household projections based on methodology used in the 2016-2017 UPWP
 - Distribute population projection report from the 2016-2017 UPWP to municipalities for feedback
 - Adjust assumptions within methodology to reflect concerns from the region's communities
 - Produce updated household projections based on results of population projections from the previous year's UPWP.

Existing Regional Model

MPO staff will continue the ongoing process of refining and calibrating the regional model in TransCAD. Further development of the model will continue with the guidance of state officials, consultants, and other RPA's. The possibility of developing a transit network / multi modal model will be researched. Efforts will include updating existing and projected demographic data, the roadway network to the latest MassDOT Road Inventory File, and traffic volumes utilizing the latest traffic counts.

During the program year, the products developed from the model, i.e. the base and future year scenarios used for network analysis of travel demand, will be reviewed, evaluated, and utilized as part of the development of the Transportation Improvement Program and other applicable studies/projects for the Region currently being developed. Reviews, comparisons and updates to and from the state related to the statewide model will continue as data is developed.

Interim documents, if produced, will be forwarded to the MassDOT Office of Transportation Planning and MassDOT Highway Division Districts as completed.

Training of MPO staff, in cooperation with state officials and guidelines, will continue as needed.

Regional Greenhouse Gas Model

MPO staff will seek to be trained in, develop, and utilize the Energy and Emissions Reduction Policy Analysis Tool (EERPAT) to analyze greenhouse gas (GHG) reduction scenarios and alternatives for use in the transportation planning process. EERPAT will allow staff to assess policy interactions in many scenarios. This modeling is part of the ongoing MassDOT effort to include GHG impacts in transportation planning processes.

Products:

Regional Demographics

Updated demographic data that will be used to develop demographic projections, modeling, and for a variety of other planning purposes in the Region. Beneficiaries include all the communities in the MRPC region.

Regional Demographics Projections

Updated demographic projections data will be used for modeling and a variety of other planning purposes in the Region. Beneficiaries include all the communities in the MRPC region.

Existing Regional Model

A model of the major road networks that can be expanded upon as needed and utilized for travel demand projecting. Various outputs will be generated based upon the needs of the MRPC, local officials and MassDOT. Beneficiaries include all the communities in the MRPC region.

Regional Greenhouse Gas Model

The impact of policies on GHG emissions at the regional level will be modeled.

Schedule:*Regional Demographics*

To be carried out between December 2017 to January 2018

Regional Demographics Projections

To be carried out as follows: attend monthly meetings with MassDOT regarding the development of updated population, household, and employment projections for the Commonwealth between October 2017 and June 2018. Update regional projections to reflect updated methodology of Commonwealth-wide projections and collect feedback on regional and state-wide projections as needed between March 2018 and August 2018.

Existing Regional Model

To be carried out as follows: network enhancements – October 2017 to June 2018; as needed model products – June 2018 to September 2018

Regional Greenhouse Gas Model

To be carried out throughout the program year

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Regional Demographics												
Demographic Projections												
Regional Model												
GHG Model												

Task 2.13

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$21,600	\$5,400			\$27,000

Objective:

The MRPC will continue to improve and develop staff capabilities with the Geographic Information Systems (GIS) purchased during previous program years. The GIS allows the MRPC to store, display, manage and analyze transportation data for different work tasks. This task will also provide GIS assistance on projects conducted as part of this UPWP, such as, road inventory file updates, Travel Time analysis, pavement and crash data management, transit analysis and impact analysis and data collection/development. Data will be developed as part of various transportation analysis projects that can be utilized in the decision-making process.

MRPC will also continue to develop and enhance its web based mapping system for use by member municipalities. This online system is entitled "MRMapper." Developed in 2012, the online web mapping system allows users to view, query and edit data utilizing advanced spatial analysis and geoprocessing tools. Prior information available to end users includes traffic count locations and data, functional classifications of roads, pavement conditions, crash locations, environmental features, road jurisdiction and federal aid eligibility. As more datalayers are developed and as requests come in from member municipalities, the MRMapper system will continue to be expanded and updated. Staff will also continue its outreach efforts to educate local communities about the MRMapper system and its applicability to their needs. Presentations will be provided to local communities and organizations as requested.

Staff will also continue to develop and release various mobile applications in response to various data needs and projects. During the past year, MRPC has introduced apps for handheld tablets that assisted communities with abandoned building locations, data collection efforts related to targeted neighborhoods for grant applications, evacuation scenario and critical infrastructure data collection and collection of infrastructure data for sewer systems. Requirements in the most recent EPA storm water MS4 permit may result in a number of mapping and mobile application requests from communities.

Staff will also continue their participation in the Massachusetts RPA GIS User Group MARGIS.

In addition, MRPC staff will continue to maintain, develop and archive digital data for the Region. Current hardware and software requirements for the GIS will be evaluated and upgraded as appropriate. Approval on expenditures over \$1,000 will be obtained prior to purchase.

This task will also provide support to member communities as part of the MRPC GIS Technical Assistance program. MRPC provides each member community with 8 free hours per calendar year of GIS technical assistance on various mapping and analysis projects. Staff consistently reviews the latest GIS principals and products and attempts to work with communities to identify areas where assistance and support can be provided. Prior work has included development of official town street maps, refinements to zoning maps, assistance in implementing online assessor maps and local pavement conditions. Efforts will continue to provide communities with feedback and assistance in developing their GIS capabilities, technical support related to equipment/software, mobile app development and data acquisition.

Previous Work:

- Mobile applications development (2014-2017);
- Montachusett Regional Transit Authority Transit Route update maps (2014-2015);
- Applications/Query tools/Data Updates for MRMapper (2014-2017);
- Travel Time GPS Data Maps (2013-2014);
- Local educational meetings related to the use of MRMapper. (2014-2015);
- Update Trail Inventory Databases (2014-2015);

- RTP Update Mapping (2015);
- Pavement data updates/mapping (2014-2017);
- General GIS/Data Warehouse Maintenance (2014-2017);
- Traffic Count data updates/mapping (2014-2017);
- Title VI Mapping (2014)
- Applications/Query tools for MRMapper (2012-2013);
- Sidewalk/Walkability Mapping – Groton & Westminster (2012);
- MRMapper online web based GIS mapping system (2012)
- Establishment of Technical Assistance Program for member communities.

Methodology:

- Maintain and incorporate GPS data as collected
- Continue support and enhancement of MRMapper online GIS program
- Provide local support related to the use of MRMapper
- Ongoing training and enhancement of staff and system abilities.
- Continued collection, analysis and refinement of data sets in order to provide inputs for various planning tasks.
- Integration of existing databases (accident and road inventory) into the GIS as appropriate.
- Support of UPWP tasks and special reports where appropriate and necessary.
- Produce handheld applications based upon project needs. Process will include:
 - Identification of transportation related need, ex. count locations, crash data collection, etc.
 - Define applicable data sets available
 - Define required data inputs for application
 - Compile application
 - Test application on various platforms
 - Refine, correct, and/or improve based on testing
 - Disseminate application to interested individuals or municipalities
 - Provide support services as needed
- Provide local support related to developed apps as requested.
- Local GIS Technical Assistance support.

Products:

Continue updating of a data report/listing of archived GIS data for member communities.

Base map and overlay files that can be utilized for numerous tasks including: travel demand modeling, traffic assignment, capacity analysis, accident reporting and analysis, pavement management, transit routing, environmentally sensitive areas, etc.

MRMapper Online Web based mapping system with relational data for MRPC communities.

Handheld apps as project needs are developed.

Information generated will be used to augment or as inputs to numerous studies and tasks as needed.

Schedule:

To be carried on throughout the program year.

Technical support: As needed throughout program year.

MRMapper applications and updates – as developed October 2017 to September 2018.

Handheld applications developed throughout the program year based on needs.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Technical Support												
MrMapper Updates												
App Development												
Datalayer Maintenance												

Task 2.23

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$45,600	\$11,400	\$4,000	\$1,000	\$62,000

Objective:

The objective of this task is to continue to develop and maintain a region wide database of information related to regional transportation issues that can be used in the development of studies, analyses and the decision-making process.

Included in this task is the yearly traffic counting program that utilizes automatic traffic recorders (ATRs) and the intersection Turning Movement Count (TMC) program in order to determine Level of Service (LOS) at major intersections. MRPC will also utilize a video traffic counting system purchased in early 2013 known as Miovision to conduct TMCs, volume counts, pedestrian/bicycle counts as well as other non-traditional/difficult counts. In particular, trail usage counts will be examined in more detail to determine applicability. Two Radar counters were also recently purchased in 2015 that will assist with speed studies.

This program will also cover the regular data collection begun under prior work programs related to pavement conditions on federal aid eligible roads as part of the Pavement Management element of the Management Systems task. There are approximately 660 miles of Federal Aid roads in the Montachusett Region that will continue to be surveyed through a 2 year inventory program.

This task will also continue efforts to refine and update our GIS safety database as new crash data is obtained both from the state and local municipalities.

Data collected as part of the Sidewalk Inventory & Pedestrian/Bicycle Connections task (2.52) will be compiled into a workable database/management system that can be reviewed and tracked in upcoming years.

Under the regional safety review program staff will continue to cooperate with the State to meet the goals of the MAP-21 Safety Planning Factor which seeks to improve safety at high crash locations through the Highway Safety Improvement Program (HSIP). HSIP is a data driven program that needs to include crash report gathering and analysis, identification of hazardous crash sites, prioritization and implementation of projects that improve safety at these sites and evaluation of the effectiveness of those safety improvement projects. Staff will continue to refine and update our GIS Regional Crash Database as new crash data is obtained both from the state and local municipalities and to work with the MassDOT Road Safety Audit (RSA) program. Staff will seek to meet with communities in the region to identify and encourage safety improvement project development at high crash locations. Implementing low cost safety improvements will also be recommended.

In addition, staff will provide data support as needed in order to address local and regional issues as they are identified.

Previous Work:**Traffic Count Program:**

- Traffic counts taken since the initiation of the program in FY 84-85;
- Computerized file system of historical traffic volumes on a town/roadway basis;
- Online maps and database of historical traffic count data;
- Video traffic counting system – 2013
- Radar traffic counting system – 2015

Pavement Management Inventory Program:

- Database of Federal Aid Eligible Roads
- 2011 – 2014 reports “Regional Pavement Profile”

- 2 Year Inventory Schedule
- 2016 Montachusett Regional Transportation Plan
- Montachusett Pavement Inventory Program – 2008, 2009, 2010, 2011
- Establishment of GIS Datasets for MRPC
- Technical Support Groups (Pavement Management Users Group)

Regional Safety Review Program

- MRPC Regional Crash Database (ongoing)
- MRPC High Crash Locations website application (ongoing)
- MRPC Top Lane Departure Crash Locations website application (ongoing)
- Rt 70 & Old Union Tpk Roundabout (Lancaster) Before & After Safety Performance Analysis – 2017
- Route 2 Before and After Safety Performance Analysis – 2017
- South Athol Road Interchange Study, Athol – 2017
- Shirley Railroad Crossing Review and Analysis – 2017
- RSA - Lunenburg Rd (Rt 70) at Main St (Rt 117), Lancaster RSA - 2017
- RSA - John Fitch Highway at North St & Pearl St, Fitchburg RSA - 2017
- RSA - Westminster Street at Ashburnham Street, Fitchburg RSA - 2017
- RSA - Westminster Street at Simonds Road, Fitchburg RSA - 2017
- RSA - Route 12 at Nelson Lindell Hamilton, Leominster RSA – 2017
- Traffic Study: Groton Rd (Rt 225) and Townsend Rd Intersection, Shirley - 2016
- RSA - Route 2 & Route 68, Gardner RSA - 2016
- RSA - Leominster Connector & Nashua St, Leominster RSA - 2016
- RSA - Route 12 & N Row Rd, Sterling RSA - 2016
- 2016 Montachusett Regional Transportation Plan
- RSA - South St / Electric Ave / Old South St intersection, Fitchburg RSA - 2015
- RSA - Route 12, Leominster RSA – 2015
- Reduce lane Departure Crashes at High Crash Curve Locations Program, Lancaster - 2014
- Traffic Study: John Fitch Highway and North St/Pearl Hill Rd Intersection, Fitchburg - 2014
- RSA - Route 140 at Route 2A, Westminster RSA – 2014
- Route 117 Corridor Profile, Lancaster - 2013-2014
- Route 12 and Willard Street in Leominster Before and After Safety Performance Analysis - 2013
- RSA - Route 101 (Center Street)/Corey Hill Road/Williams Road, Ashburnham RSA - 2013
- RSA - Water Street at High Street and Water Street at Main/Sterling Street, Clinton RSA - 2013
- RSA - Leominster Road (Route 12) at Chocksett Road, Sterling RSA - 2012
- 2012 Montachusett Regional Transportation Plan
- RSA - Route 140, Winchendon RSA - 2012
- RSA - Route 13, Leominster RSA - 2012

Methodology:

The 2016-17 Traffic Count program will consist of the following sub-tasks:

- Provide assistance to MassDOT's state-wide traffic counting program. MRPC will count approximately 25 locations in the region normally taken as a part of the MassDOT traffic count program;
- Maintain a testing program of traffic counters to ensure accuracy of data based upon MassDOT procedures;
- Continue to establish database link of regional counts to GIS;
- Maintain ADT computer file system on a town/roadway basis;
- Continue to develop, refine and implement a permanent regional traffic counting program of approximately 300 locations;

- f. Conduct Turning Movement Counts (TMC) at major intersections region-wide as part of the regional traffic counting program to determine Level of Service (LOS) for those locations.
- g. Provide for special count requests within the region as requested for local technical assistance.
- h. Update traffic count data posted on MRPC website (www.mrpc.org).
- i. Implement Video Traffic Counting System at various locations to collect TMCs, volumes, bicycle/pedestrian trail counts, etc.
- j. Upload all traffic count data to the statewide MS2 website.

As part of the Pavement Management collection program, the following will be undertaken:

- a. Collect roadway condition information including but not limited to ride, distress, and rutting conditions that adversely impact surface conditions on approximately 200-300 miles of regional roads;
- b. Conduct analysis of the inventoried roads;
- c. Update PMS database, including recent repair/reconstruction activities, based upon data collected;

As part of the Regional Safety Review program, the following will be undertaken:

- a. Staff will attend SHSP and HSIP meetings and receive training as needed.
- b. To update the GIS Regional Crash Database the following will be undertaken:
 1. Receive and collect crash data from MassDOT and communities;
 2. Review, verify and correct crash data at selected locations;
 3. Coordinate crash data with GIS for mapping purposes;
 4. Update crash data and candidate high crash locations for communities for their review.
- c. Create individual community reports of candidate high crash locations from the updated GIS Regional Crash Database for the purpose of seeking the development of safety improvement projects.
- d. Seek to meet with communities in the MRPC region to discuss developing projects or to recommend further study at the candidate high crash locations or other locations identified through safety analysis, local requests, state request, local or regional studies or other data.
- e. Continue to work cooperatively with the MassDOT RSA program to conduct RSAs at candidate high crash locations to meet the goal of the state HSIP to develop safety improvement projects for the TIP. An RSA will be sought on any TIP project that has candidate high crash location(s).
- f. Recommend further study into implementing low cost safety improvements that can be constructed relatively quickly to help remediate a safety problem at candidate high crash locations.

As part of the Sidewalk Inventory & Pedestrian/Bicycle Connections program, the following will be undertaken:

- a. Collect data from local communities through Task 2.52;
- b. Establish a database and analysis program related to information collected.

Product:

Traffic Count Program

- Complete 75 to 100 traffic counts throughout the Region (including approximately 25 MassDOT permanent coverage stations);
- Complete 10 to 20 TMC at intersections throughout the Region;
- Maintain a file of traffic counts on a town/roadway basis and a datalayer of regional counts with GIS;
- Maintain documentation/records of testing procedures and accuracy of equipment utilized in data collection
- Update and maintain count data on MRPC website and statewide MS2 site.

Pavement Management collection program

- Compile and inventory pavement conditions on approximately 100-200 miles of federal aid eligible roads;
- Update Pavement Management database based upon collected data;
- Incorporate pavement condition data into the MRPC's GIS;

Regional Safety Review Program

- Updated GIS Regional Crash Database;
- Updated Candidate High Crash Locations MRPC website application;
- Regional and Community Candidate High Crash Locations Reports and potential list of safety improvement projects;
- Completed RSAs at various locations.

Sidewalk Inventory & Pedestrian/Bicycle Connections Program

- Database of sidewalk and pedestrian/bicycle connections in regional communities

Schedule:

Most data collection to occur from April through November, depending upon local weather conditions. Other support efforts likely to occur throughout the program year, i.e. LOS analysis, Travel time analysis, etc.

Safety Database Program – Data collection – October 2017 to April 2018; Data Review – February 2018 to August 2018

Regional Safety Review Program – Data collection and review – October 2017 to May 2018; Community Reports and outreach – January 2018 to August 2018

Sidewalk Inventory & Pedestrian/Bicycle Connections Program – Data collection and Review – October 2017 to August 2018 depending on weather conditions

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Traffic Counts												
Safety Data Collection												
Safety Data Review												
Sidewalk & Ped/Bike												

Task 2.33

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$28,800	\$7,200			\$36,000

Objective:

The objective of this task is to continue regional efforts to maintain a Pavement Management program for federal aid eligible roads.

The Pavement Management Program, begun under prior work programs, will continue to evaluate federal aid eligible roadways within the Region. There are approximately 660 miles of Federal Aid roads in the Montachusett Region that will continue to be surveyed and incorporated into the pavement management program. MRPC has established a 4-year program to inventory and analyze these roads.

RoadManager Software will be used for the third year as the MRPC continues to build its database. A report on regional pavement conditions will be developed at the end of the year. The MRPC purchased the Road Manager pavement management program in 2015 and began training on the use of the software in 2015 - 2016. Prior data will continue to be migrated to the Road Manager program. New data will be input into the software and analysis will continue.

In addition, this task will allow for our participation in the RPA/State Pavement Management User Group as well as other potential work based upon arrangements and directives from MassDOT through a Pavement Management Program.

Staff will also continue its outreach to area DPW Superintendents, Planning Directors, etc. in order to provide communities with pertinent data and materials. Communities utilize their limited Chapter 90 funds to address local road condition issues based upon various local parameters. In order to assist them in attempting to maximize the value of funding, this program will continue to provide available data related to their towns through various outreach methods.

Staff will also maintain its membership and participation in the Worcester County Highway Association.

Previous Work:

- Database development under new RoadManager Software
- RoadManager software program purchase and training
- Data migration to Road Manager system
- 2016 Montachusett Regional Transportation Plan
- 2012 Montachusett Regional Transportation Plan
- 2011 – 2017 reports “Regional Pavement Profile”
- Database of Federal Aid Eligible Roads
- 4 Year Inventory Schedule
- Montachusett Pavement Inventory Program – 2008 - 2017
- Technical Support Groups (Pavement Management Users Group)

Methodology:**Pavement Management**

- Continue new database development with new software
- Data collection based on Road Manager input requirements
- Analysis reports utilizing new Road Manager software
- Develop local condition maps for member communities.
- Participation in RPA Pavement Management Users Group.
- Technical assistance to MassDOT Highway as part of state PMS program based upon mutually agreeable scope.

- Update PMS database, including recent repair/reconstruction activities.
- Assist interested town with PMS programs as requested.
- Participation in Worcester County Highway Association
- Public outreach and presentation where necessary and requested
- Conduct project specific pavement analysis and profiles as needed
- Assist communities in the compilation of local projects, the PNF/PIF process and public awareness as needed.

Products:

Pavement Management

- Distribution of annual mailing consisting of pavement related activities including but not limited to: Report information, Ch. 90 information, Questionnaires, Services, etc.
- Distribution of year-end report "Regional Pavement Profile" analyzing region and municipal pavement data
- Distribution of individual municipal specific profiles as needed
- Pavement Management database for federal aid eligible roads.
- Database information for incorporation into the MRPC's GIS.
- Integration of data and analysis into project level reports as needed.
- Community condition maps.
- PNF/PIF's for federal aid eligible roads based upon community needs

Schedule:

Pavement Management – Data collection efforts to be carried out during October/November 2017 and April to September 2018. Analysis and review of data to be conducted from December 2017 to September 2018.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Pavement Data Collection												
Pavement Analysis												

Task 2.43

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$16,000	\$4,000			\$20,000

Objective:

Under this task, staff will inventory sidewalk locations and conditions along the MART bus routes in the City of Gardner. This inventory will focus on current major bus routes and stops to determine where the bicycle and pedestrian connections are and where they are needed. Existing trail connections will also be included in the analysis. This data would also assist the City in prioritizing sidewalk and bike lane installations and repairs. The goal is to move these communities towards Complete Streets and to assist the state with their GreenDOT goals all while making transit more accessible to all users.

This task would expand upon previous sidewalk inventory projects in Fitchburg & Leominster as well as past bicycle and pedestrian connections projects with the hope of improving non-vehicular connections to transit and improved trail use and economic development throughout the region.

Previous Work:

- Sidewalk Inventory (Fitchburg/Leominster) – 2017
- Trail Connections – 2016
- Access to Commuter Rail in the Region – 2013-2015
- Electronic Formatted Community Trail Maps - 2013
- Montachusett Regional Trail Coalition, established in 2013
- Montachusett Trail Inventory Update - 2013
- Montachusett Regional Trail Visitor Guide - 2014
- 2016 Montachusett Regional Transportation Plan
- Montachusett Trail Inventory Reports – 22 MRPC Communities (2005-2011)

Methodology:

- Inventory sidewalks and bike lanes in the Cities of Fitchburg and Leominster along transit routes;
- Conduct analysis of data related to sidewalks and bike lanes;
- Assess connections to existing trails within communities;
- Prioritize sidewalk needs for transit purposes.

Product:

- Maps showing all sidewalk and bike lane locations and their condition;
- Maps showing where the sidewalk and bike lane needs are for planning purposes.

Schedule:

Sidewalk and bike lane data gathering will be conducted by our seasonal traffic technicians and or MPRC staff during the months of October, November and December.

Needs and priorities will be analyzed and documented during the months of January, February and March.

Final maps and products completed by September 2018.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Data Collection												
Analysis & Priorities												
Final Reports												

Task 2.53

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$20,400	\$5,100			\$25,500

Objective:

This task will address the Performance Measure Review and analyze 1 to 2 freight corridors through development of a Unified Planning Work Program (UPWP) task every 5 years for Goal 5 - Improve Economic Vitality and Freight Movement of the 2040 Montachusett RTP. This task will identify and prioritize freight corridors in the Montachusett Region for further study.

Previous Work:**Methodology:**

MRPC Region (Region) Freight Corridor Screening

- Identify Freight Movement Activity Centers (Centers)
 - Review existing databases and/or conduct field reviews in the Region to identify shippers, truckers, and other sites (such as post offices) that generate freight or heavy truck traffic.
 - Create Freight Corridors (Corridors) using GIS by identifying where the Centers are located and the routes they are located on.
 - Identify the access type provided to the Centers.
 - Observe the operations at the driveways or intersections and note the degree of difficulty of making turns into or out of the Centers.
 - Identify the nearest non-Region regional freight facilities, that may indicate the direction of entering/egressing heavy trucks for the Centers.
- Identify bridge restrictions and other bridge constraints for heavy trucks along the Corridors.
- Identify heavy truck constraints to accessing Route 2 to and from the Corridors.
- Crash Data Analysis
 - Analyze crash data for the identified Corridors and review the data for the number of crashes involving trucks.
 - Review crash data for HSIP eligible crash locations and their proximity to the driveways and access points of the Centers.
 - Review other crash data and report trends or observations as to the types of crashes and their locations.
 - Based upon this analysis, identify any potential trouble spots that may require additional and more detailed analysis of crash data and trends.

Depending on the results of the Screening, a Priority Freight Corridor Study List will be developed and Corridors will be recommended for further study. At least one Corridor will be selected from this list for further study for the FFY 2018 UPWP.

Public participation will be sought from freight stakeholders directly. Their involvement will be a valuable resource for undertaking the task of improving economic vitality, freight movement, and the challenges that they face in the MRPC region. Additional efforts will be made to identify and coordinate with these stakeholders.

Products:

Prioritized Freight Corridor Studies Report for the MRPC Region.

Schedule:

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Public Participation												
ID Freight Centers												
ID Bridge Restrictions												
ID Rt. 2 Access Rest.												
Crash Data Analysis												
Draft												
Final Report												

Task 2.63

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$18,400	\$4,600			\$23,000

Objective:

This task will seek to collect data regarding past, current, and future development initiatives across the region. The collection of this data will inform the development of new population, household, and employment projections by MassDOT. Data regarding cost, incentives used, housing units produced, square footage by use, estimated employment, and current status of each development project will be collected where available. MRPC staff will seek the assistance of municipal officials, developers, and economic development authorities across the region to comprehensively collect the data required for this initiative. The end result will be a database of development initiatives for the region which will be inputted in the Metropolitan Area Planning Council's (MAPC) development database website, MassBuilds, for use by MassDOT for their projections initiative.

Previous Work:

- N/A

Methodology:

In order to comprehensively collect data regarding all development projects, MRPC staff will:

- Contact economic development entities and local chamber of commerce to inquire about existing initiatives
- Contact municipalities seeking data regarding developments in each community
- Conduct online searches regarding development initiatives not collected from initial data collection procedures
- Input collected data into MassBuilds website

Products:

A comprehensive database of past, current, and future development projects for use in development state-wide projections and other initiatives within the transportation planning process.

Schedule:

Data Collection: October 2017 – December 2017

Data Input to MassBuilds: October 2017 - December 2017

Projections Committee Meetings – October 2017 – June 2018

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Mapping												
Database Development												
Projections Committee Meetings												

Task 2.73

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$15,600	\$3,900			\$19,500

3.0

TRANSPORTATION PLANNING STUDIES

Objective:

This task is a continuation of Task 3.12 from the previous UPWP. As identified in the 2016 RTP, the Town of Athol is seeking to initiate a project for the construction of an interchange on Route 2 at South Athol Road. These roads are grade separated and would need ramps to connect them to create an interchange. The proposed project is based on the following comments received from the Town:

- Freight movement in Athol is limited due to railroad bridge height restrictions that results in heavy trucks using side streets and driving through residential areas;
- New commercial developments on Templeton Rd (Route 2A) have the potential of producing traffic backups on Route 2 at Exit 18;
- The interchange would improve heavy truck access to Route 2;
- The interchange would promote economic growth in Athol.

As a potential additional benefit:

- Heavy truck traffic on smaller local roads would cease thus creating a safer roadway environment in neighborhoods, extending the pavement life of neighborhood roads, and healthier neighborhoods through decreased vehicle exhaust emissions.

The purpose of this task is to conduct a study that will evaluate and consider the potential effects of converting these grade-separated roads into an interchange on the existing transportation system and on the surrounding environment as well as providing ramp alternatives. The study will assess the impacts of the proposed interchange on the Route 2 mainline, on the arterial/collector roadway network in Athol, and regionally. Given the importance of this proposed project, the MRPC will seek to establish a Study Advisory Team to provide input. Potential Team members include MassDOT District 2 staff, the Franklin Regional Council of Governments (FRCOG), the Town of Athol, and neighboring communities.

The Study Advisory Team will fulfill the FHWA's Regional Models of Cooperation guidance for the FY 2018 UPWP.

Previous Work:

- 2016 Montachusett Regional Transportation Plan – 2015
- Access Safety & Operational Analysis of Route 2 Interchanges & At-Grade Intersections in the MRPC Region – 2009
- Draft RSA: Major Highway Median Cross-over Crashes, Route 2 Phillipston (& Athol) – 2008
- Route 2 Safety Improvement Study – 1997
- Proposed S Athol Rd Interchange (partial) – (unknown year)

Work Completed Under the FY 2016 UPWP:

- Created DRAFT Study Advisory Team;
- Developed DRAFT Scope of Work (SOW), met with Athol Town Officials and MassDOT District 2 and revised the SWO based on comments received;
- Obtained and reviewed previous studies of Route 2 and Athol;
- Identified routes used by trucks developed in conjunction with Athol Town Officials;
- Developed draft existing conditions, constraints, and data development needs such as traffic count locations;
- Developed draft potential constraints/issues related to potential layout of interchange

Methodology:

The following will be conducted:

1. Finalize Study Advisory Team and coordinate efforts with the Team;

2. Finalize existing conditions constraints, and collect data;
3. Identify potential constraints/issues related to potential layout of interchange;
4. Develop recommendations and/or alternatives related to findings for implementation;

Product:

The final product will be a report of the study area with current conditions and recommendations that address concerns related to the possible interchange. The recommendations could result in the programming of future TIP projects.

Schedule:

To be carried out throughout the program year.

Product completion estimated: September 2018.

	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Finalize Study Team												
Public Meetings with Study Team												
Complete Data Collection												
Complete Data Analysis												
Alternatives/Recommendations												
Drafts												
Final Report												

Task 3.13

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$31,600	\$7,900			\$39,500

Objective:

The creation of Performance Measures (PMs) was a main focus of the 2016 Montachusett Regional Transportation Plan (RTP). PMs remain a priority under the recently passed federal authorization “Fixing America’s Surface Transportation (FAST) Act”. PMs are meant to inform and improve the MPO decision making process. PMs are set to achieve a desired set of performance outcomes for a multimodal transportation network. After an MPO develops their set of performance outcomes, the PMs are used to track the performance of the outcomes over time to determine the progress in meeting them. This task includes continued work on maintaining a centralized database of PMs which was originally created during the 2016/2017 UPWP. This Dashboard is designed to monitor PM progress and inform data needs throughout the program year. The dashboard will also inform the public on the conditions in the transportation network and progress being made towards goals which have been set.

MPOs will eventually be required to establish performance targets in relation to performance measures (after the setting of state targets). This task will also allow staff to coordinate regional measures with state and federal regulations and rules as they are developed.

In addition, because of the link between PMs and the RTP, work under this task will also begin the process of updating the 2016 Montachusett RTP. This will involve reviews of existing chapters, identification of pertinent data needs and inputs, structure outline, required and/or additional outreach activities, identification of collaboration needs and a schedule/timeline for final development. Staff will also participate in the state’s efforts related to demographic projections through a separate committee. Work efforts will be coordinated with Task 2.13 Regional Demographics & Model.

Previous Work:

- Goals & Objectives for the 2016 Regional Transportation Plan 2015
- Regional Performance Measures and Targets 2015
- Montachusett Regional Transportation Plan 2016
- Regional Crash Database
- Traffic Counting Program
- Geographic Information System for the Region
- Pavement Management Regional Report
- Regional Trail Inventory
- MRPC Roadway Safety Improvement Project Selection Report
- Climate Change and Transportation in the Montachusett Region
- Roadway & Alternate Mode Access to Commuter Rail in the Region
- Montachusett Trail Map & Visitor Guide
- Siting of Renewable Energy Facilities
- Road Safety Audits
- Performance Measure Dashboard and Data Warehouse - 2017

Methodology:

The following activities will be undertaken as part of the development of this program:

Performance Measures

- Filling data needs and gaps. (February – September 2018)
- Maintenance of Dashboard – Throughout program year

Update to the RTP

- Individual RTP Chapter Reviews (October 2017 – January 2018)
- Identification of Chapter Data Needs (December 2017 – June 2018)
- Identification and Coordination of Outreach Needs and Collaboration Efforts (January 2018 – August 2018)
- Establishment of RTP Outline and Schedule (July 2018 – September 2018)

Products:

Updated Performance Measure Dashboard

Outline and Schedule for Development of RTP Update

Schedule:

To be carried out throughout the program year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
List of new data needs												
Data Collection												
Refinements												
Update Dashboard												
RTP Chapter Review												
Identification of Data Needs												
Coordination Needs												
Outline/Schedule of RTP												

Task 3.23

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$18,800	\$4,700			\$23,500

Objective:

MRPC will continue to work toward building and evaluating a database of the regions most congested roadways and bottlenecks using information from travel time studies done on selected roadways. Travel time will be measured using GIS tracking equipment and analyzed to determine reasons areas are congested. This data will help with attaining Goals set forth in the 2016 Regional Transportation Plan which are tied to various congestion and greenhouse gas reduction Objectives and Performance Measures. Possible trends will be identified as Travel Time data has been collected on these corridors for the last 3 years. MRPC will consider this information when prioritizing projects on the TIP and make any databases created available to municipal public works departments or other interested parties. In addition, staff will investigate potential outside data sources related to traffic congestion, i.e. Google Maps, Garmin GPS, etc., to augment available information.

MRPC staff will also continue to work with and assist MassDOT in relation to GreenDOT initiatives. This includes the analysis and calculation of possible Greenhouse Gas Emissions (GHG) of transportation projects within the Transportation Improvement Program (TIP) where appropriate.

An important part of our Climate Change Program will be to update vulnerable infrastructures identified in the 2016 RTP to be included in transportation decision making. Major roadways and rail lines will be identified and mapped to assess their proximity to various flood zones in order to assess vulnerability. The MRPC has developed Pre-Disaster Mitigation Plans for individual communities in the Region. Data from these reports will be incorporated where applicable. All activity in this task will be directly related to an action item in the 2016 RTP to “Program and implement 100% of Congestion Mitigation Air Quality (CMAQ) project funds available within the TIP.”

During the previous work program MRPC developed a Stormwater Data Collection App which was made available to member communities required to abide by the EPA’s MS4 Permit. Any request for assistance or training on this application will be covered under this task.

Under this task staff will also chose one “bottleneck” location in the region to conduct a study. This study will ultimately assist our goal set in the 2016 RTP to “Reduce congestion and improve mobility”. Through this study, the objective will be to make an improvement to a congested corridor in the Montachusett region.

Previous Work:

- Community Pre-Disaster Mitigation Plans - 2016
- 2016 Montachusett Regional Transportation Plan – August 2015
- Travel Time Data and Analysis – 2014, 2015, 2016
- GIS Datalayer – Travel Time 2014, 2015
- Stormwater App – 2016-17

Methodology:

- Conduct travel time studies at various locations to continue to build comparable data through multiple years;
- Collect additional congestion data from outside sources;
- Incorporate all available congestion data and identify locations for project development to address issues;
- Map major roadways and rail lines within flood zones within the region;
- Assess flood vulnerability of identified roads and rail lines;
- Conduct GHG analysis of applicable TIP projects based upon MassDOT guidelines
- Use any related Climate Change Program activities to maximize amount of CMAQ funds spent in MRPC Region

- Assist communities with Stormwater App as needed
- Conduct a “Bottleneck” study at a location in our region which will result in suggestions for decreased congestion

Products:

- Database of various congested corridors throughout the region (January 2018)
- GHG emissions analysis for TIP projects (May 2018)
- Updated vulnerable infrastructures database (August 2018)
- Bottleneck Study (September 2018)

Schedule:

To be carried out throughout the program year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Data Research												
Data Collection												
Database Updates												
Flood Zone Mapping												
Vulnerability Analysis												
GHG Analysis												
Bottleneck Study												

Task 3.33

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$24,800	\$6,200	\$4,000	\$1,000	\$36,000

Objective:

The objective of this task is to provide a quick and effective response mechanism to handle special, short term issues and projects as they arise. This will include the development, upon the written request from the chief elected official of a local community or from state and federal agencies, of detailed technical data and reports that will assist local communities or the MassDOT in improving the Region's transportation system. Studies will include accident analyses, intersection capacity investigations, signal warrant investigation, analysis of potential projects related to Management Systems Activities, and traffic impact reports. Based upon local requests, reviews of proposed development impact reports will be conducted to determine accuracy, feasibility, completeness and integrity of results. Where appropriate GIS applications will be utilized. These studies may involve the establishment of a subarea transportation model, analysis of major and/or critical intersections within the study area and liaison with local and state officials in order to determine viable solutions to the identified problems.

In addition, it is anticipated that follow up work related to prior UPWP tasks will be undertaken under this task. This task will cover staff work required to print and or distribute documents in both an electronic and hard version to members of the MRPC region. Staff will investigate the possibility of electronic distribution through USB, CD and or other applicable means. Any costs in excess of \$1,000 will require prior approval from MassDOT before expenditure.

Staff will also assist the community requests with the Project Initiation Form (PIF) and Project Need Form (PNF) submission process for towns interested in pursuing a project through the Transportation Improvement Program (TIP).

Previous Work:

- Critical Urban and Rural Freight Corridors Identification and MPO Endorsement – 2017;
- Harvard Town Center Study – Harvard, 2016;
- Development Impact Study Review, Cumberland Farms – Leominster, 2016;
- Templeton Project Data Review – Patriots Road, 2015-16;
- Winchendon Safety Review & Project Discussions – Route 140, 2016;
- Local Town Impact Data & Review Related to Proposed Leominster Casino – Sterling, 2013;

Methodology:

Provide technical assistance in the form of meetings, data and reports to MassDOT, DEP, local communities, and other local, State and Federal agencies as the need arises. This includes, but is not limited to: air quality analyses; intersection and capacity analyses; traffic impact analyses of proposed developments; both commuter and municipal parking analyses; carpool/vanpool analyses; GIS applications and routine requests from local communities or citizens that continually arise in connection with the administration of the transportation planning program. Technical assistance from MassRides will be sought related to carpool/vanpool issues.

For each non-routine issue or sub-regional analysis, a study design will be developed for the Office of Transportation Planning /FHWA approval that outlines the geographic scope and level of effort required, including on a generalized basis a cost estimate based upon mandated requirements. In addition, potential bicycle and pedestrian connections will be reviewed and evaluated as part of any study.

Products:

Detailed technical data and reports as appropriate. Distribution to include local officials of communities involved as well as state and federal officials. PIF/PNF submission forms upon local request.

Schedule:

To be carried out throughout the program year as requests received.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Response to Local Requests												

Task 3.43

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$20,000	\$5,000			\$25,000

Objective:

MRPC transportation staff will coordinate this task with the MassDOT effort, and other MRPC staff efforts, to bring about municipal Americans with Disabilities Act (ADA) Transition Plan compliance in the MRPC Region. The ADA Act provides standards that secure accessibility of public services and facilities for people with disabilities. To accomplish this task for the twenty-two municipalities that comprise the MRPC Region, the MRPC will first seek to learn the ADA Transition Plan (Plan) status for each municipality.

In the first year of this task the MRPC will then seek to assist the local governments of up to three municipalities to either prepare a Plan or to update an existing Plan. The MRPC transportation staff primary focus will be to assist municipalities with the public rights-of-way facilities (see below) section of the Plan while other MRPC staff will focus their effort on other facilities. Request for proposals for consultant services to prepare or update a Plan should also be considered by municipalities.

Previous Work:**Methodology:**

The MRPC will seek to assess the Plan compliance status of each municipality in the MRPC Region as follows:

- Seek MassDOT input from their ongoing public engagement process for the purpose of possibly obtaining the Plan compliance status of each MRPC municipality
- The MRPC will communicate this effort to the municipalities in the MRPC through meetings and other venues
- The MRPC will develop an online Plan status survey for municipalities to complete
- The MRPC will follow up on the communities that do not respond to outreach

The MRPC will seek a to schedule a Plan development training workshop for MRPC municipalities to be held in the MRPC Region for late fall or early winter of 2017.

After the completion of the above steps, the MRPC will seek to assist the local governments of up to three municipalities in either preparing a Plan or updating an existing Plan based on the FHWA Massachusetts Division Office Plan components. There are six components that should be included in a municipal ADA Transition Plan.

The six components are summarized below.

I. Self-evaluation:

- a) Describe the policies and practices the municipality evaluated that may affect physical or communications access to programs, service, or activity; and describe any modifications made or planned as a result of the evaluation.
- b) Describe the technical survey of municipal owned/operated facilities according to the appropriate standards; and describe all deficiencies identified.
- c) Describe the public participation plan that affords interested persons, including individuals with disabilities or organizations that represent individuals with disabilities, an opportunity to participate in the Self-evaluation.

Self-evaluation can help municipalities sort through and prioritize issues that improve accessibility for people with disabilities. Improving accessibility at the local level increases their level of independence. Also, having a Plan can be a valid defense for a municipality in ADA-related legal actions.

II. Public Rights-of-Way Barrier Removal/Transition Schedules:

These schedules are lists of all public rights-of-way ADA deficiencies that provides a prioritization scheme for installation, alteration/reconstruction consistent with requirements. Suggested Schedules may include but may not be limited to:

- Curb Ramps
- Sidewalks
- Accessible Pedestrian Signals
- Bus Shelters/Stops
- Street Level Crossings Deficiency Removal

III. Multi-year Plan:

- a) Describe the method(s) and plan for making your programs and services accessible when viewed in their entirety.
- b) Develop a budget.
- c) Develop a monitoring plan.
- d) Develop a system to report progress and to update the plan.
- e) Describe the public participation plan that affords interested persons, including individuals with disabilities or organizations that represent individuals with disabilities an opportunity to actively participate in the ADA Transition Plan.

IV. Indicate the agency or public official responsible for implementation of the plan; the official assigned to manage the day-to-day implementation of the plan must have sufficient authority to direct the activities and resources necessary to carry it out. In addition, the person ultimately responsible for the plan must be the head public or agency official.

V. The designation of an ADA Coordinator who is responsible for organizing the public entity's efforts to comply with regulations. This person is also responsible for handling ADA complaints.

VI. Establish and disseminate a grievance procedure and public notice that conforms to ADA requirements.

Based on the demands of the six components, there is a possibility that these Plans may not be completed during the Program Year therefore they will be carried over to the next Program Year. However, the Baystate Roads *ADA Transition Plans Made Easy* workshop may provide methods that will help to decrease the length of time needed to complete a Plan.

Products:

Up to three municipal ADA Transition Plans.

Schedule:

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Seek MDOT Input												
Muni Outreach												
ADA Plan Workshop												
Assist Municipalities with Plan												
Drafts												
Final Reports												

Task 3.53

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$26,800	\$6,700			\$33,500

Objective:

This task will seek to expand a regional transit survey that was conducted by MRPC and MART in 2017 and include all MRPC communities in order to better identify all transportation needs, gaps and issues that are of importance to various populations throughout the region. The survey distribution will be focus on four key elements for transportation needs in the region; large business employers, elderly populations, medical buildings and higher education. The MRPC will work in coordination with Fitchburg State University (FSU) and the Community Health Network Area 9 (CHNA 9) to distribute surveys and analyze survey data. This project will result in a better understanding of the transportation needs of the region which will lead to more focused transportation and transit projects.

Previous Work:

- Ridership Survey Development - 2017
- Transit Development Program Update – Fitchburg and Leominster 2013; 2003; 2008
- Transit Development Program Update – GLink 2005; Gardner 2000
- 2016 Regional Transportation Plan

Methodology:

- Review prior surveys conducted by MART and MRPC
- Identify distribution methods and locations across the region to maximize outreach to all populations;
- Finalize survey format and questions;
- Translate survey into applicable languages for distribution to various populations.

Products:

A transportation needs survey that will help MRPC and FSU identify and analyze the transportation needs for the region.

Schedule:

To be carried out throughout the program year.

Survey Development – October 2017 – December 2017

Identification of Distribution Points and Methods – December 2017 – January 2018.

Survey Distribution – January 2018 – March 2018.

Survey Analysis – March 2018 – May 2018

Results Document – May 2018 – June 2018

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Survey Development												
Distribution Methods												
Survey Distribution												
Survey Analysis												
Results												

Task 3.63

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$26,000	\$6,500			\$32,500

Objective:

Under this task, staff will continue to work with the Montachusett Regional Trail Coalition and other local trail advocates and groups and in addition, staff will continue efforts with these groups and member communities to update the trail inventory database and create an updated region-wide map highlighting trails and associated attractions.

In 2012, MRPC worked with the Montachusett Regional Trails Coalition to put together the first *Montachusett Regional Trail Guide*. This guide was created as the result of a high demand for more information regarding recreational trails and multi-modal transportation alternatives. Five thousand maps were printed and have been distributed throughout the region and statewide. With such a high demand for these maps, it was determined that an update and reprint of the regional trail guide would be essential to move the region towards decreased vehicular travel and increase in bicycle and pedestrian transportation alternatives.

This regional trail map will be distributed in both electronic, via the MRPC website (as well as other community or organization sites), and printed form. Funding for the printing of the map will be sought through this task with prior approval by MassDOT based upon solicited quotes.

Previous Work:

- Sidewalk Inventory along MART bus routes (Fitchburg/Leominster) – 2017
- Community Trail Brochures (Lancaster/Fitchburg) - 2017
- Trail Connections – 2016
- Montachusett Regional Transportation Plan - 2015
- Access to Commuter Rail in the Region – 2013-2015
- Electronic Formatted Community Trail Maps - 2013
- Montachusett Trail Inventory Reports – 22 MRPC Communities (2005-2011)
- Montachusett Regional Trail Coalition

Methodology:

- Compile and develop a update of local attractions associated with and near area trails;
- Compile updated local community Trail Inventory maps;
- Locate and update parking, trail ends, other pertinent data;
- Finalize Regional Trail Map design and format;
- Solicit printing quotes from area businesses. Final number of printed maps to be determined.
- Publish map online;
- Distribute printed and electronic maps to interested agencies and locations.

Throughout process, input and feedback will be provided by the Trail Coalition.

Product:

- Electronically available Regional Trail Map via MRPC website.
- Printed paper version of regional Trail Map.

Schedule:

To be implemented over the entire program year.

Update trail data – October 2017 to December 2017;

Design trail guide– January 2018- March 2018;

Printing and distribution of maps – April 2018 to September 2018.

Local Meetings – April 2018 – September 2018.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Update Trail Data												
Design Trail Guide												
Print & Distribute Maps												
Local Meetings												

Task 3.73

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$18,400	\$4,600			\$23,000

4.0

MULTIMODAL PLANNING ACTIVITIES

Objective:

The objective of this task is for the staff to participate in the Montachusett Joint Transportation Committee (MJTC) and the Montachusett Regional Planning Commission (MRPC) for transit involvement issues to represent the needs of the Transit Authority (MART). Staff will also continue to work with the Montachusett Regional Emergency Planning Committee (MREPC) on evacuation and security plans in an emergency situation. Also, staff will continue to participate in the Fitchburg Line Working Group to improve rail service on the Fitchburg Line in the Montachusett Region; the Leominster Crime Stoppers Group to continue to educate the public in participating in the crime stopper program; the North Central Regional Coordinated Council (NCRCC) in order to develop information that is helpful to transportation service users, as well as identify opportunities for coordination between service providers, and improve access to health and human services, employment and community life for all, especially the disadvantaged population; and the Human Service Transportation (HST) Coordination Advisory Group in order to assist MART, other RTAs and the communities in their effort to improve access to transportation services for persons with special mobility needs.

In addition, staff will continue efforts to meet applicable Title VI requirements, including any updates to the MPO endorsed Limited English Proficiency (LEP) Access Plan as well as other issues related to Environmental Justice, Title VI and state and federal policies as necessary. In particular, staff will address Federal Transit Administration (FTA) requirements and transit issues in regards to Title VI, Environmental Justice and LEP as they are raised and as they relate to any underserved populations that see environmental justice planning as an opportunity to address local transit issues. This task also includes efforts to encourage private enterprise and minority business participation throughout the planning process.

Previous Work:

- North Central Regional Coordinated Council (NCRCC) – on going
- Montachusett Regional Transportation Plan Update - 2015
- Montachusett MPO Endorsed Limited English Proficiency (LEP) Access Plan – February 2013;
- Annual Title VI Report – 2011, 2012; 2015
- Montachusett Regional Emergency Planning Committee (MREPC) - on going
- The Human Service Transportation (HST) Coordination Advisory Group- on going
- Fitchburg Line Working Group - on going
- MinuteVan Regional Transit Group- on going
- North Central Massachusetts Community Reinvestment Act Coalition (NCMCRA) - on going
- Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) - on going
- Northern Tier Initiative – ongoing
- Leominster Crime Stoppers Group - ongoing

Methodology:

Coordinate planning activities through participation in the MJTC.

Prepare required information/data which can assist in ongoing efforts to identify clients and available public transit services.

In addition, issues related to Environmental Justice and Title VI will be reviewed and addressed through the various aspects of this task. Where appropriate action will be taken thru the various coalitions and participation plans to improve the involvement of those traditionally not part of the planning process.

Interim documents, if produced, will be forwarded to MassDOT as completed.

Product:

Regionwide database of relevant socioeconomic data based upon collected information.

Schedule:

Ongoing throughout the program year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Public Involvement												

Task 4.13

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
		\$2,955	\$739	\$3,694

Objective:

Provide technical support services to the Transit Authority (MART) related to the improvement of the commuter rail service facilities in the Montachusett region. Efforts will include assistance to MART in assessing commuter rail parking lots, the identification and assessment of park-and-ride lots, the review of commuter rail station construction plans and bid documents and the continued monitoring of transit construction projects.

Previous work:

- 2016 Montachusett Regional Transportation Plan - 2015
- Fitchburg Commuter Rail Line Improvement Project – on going
- Wachusett Station and Layover Facility – on going
- 2012 Montachusett Regional Transportation Plan - 2011
- Wachusett Extension Environmental Assessment – 2010
- North Leominster Commuter Rail Station Parking Expansion - 2013
- Ayer Commuter Rail Parking Expansion – on going
- Assisted MART and the Town of Ayer with the location, design and funding of the Ayer Commuter Rail Parking Facility including:
 - Preparation of appropriation request;
 - Preparation of the parking alternatives;
 - Preparation of responses to MassDOT concerns regarding financial constraint and handicapped accessibility;
 - Meetings with Town Officials to discuss federal funding of Ayer Commuter Rail Station.
- Littleton Commuter Rail Station improvement – 2016
- Ayer Parking Garage Impact Analysis - 2009
- Wachusett – Gardner Extension (Phase I: Feasibility Screening) – 2009
- Fitchburg Commuter Rail Line Improvement Project (Alternatives Analysis Report) - 2007

Methodology:

MRPC will continue to review the commuter rail services in Fitchburg/Leominster and assist in the technical support and implementation of improvements to the region's facilities. This will include all stops along the Fitchburg MBTA line from Littleton to Fitchburg (and Gardner).

Product:

Support services at meetings and presentations related to improvements to area facilities. Where appropriate technical documents and reports will be developed.

Schedule:

To be carried out during the program year.

Wachusett Station and Layover Facility – October 2017 to September 2018.

Ayer Commuter Rail Parking Projects – October 2017 to September 2018.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Wachusett												
Ayer												

Task 4.23

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
		\$6,000	\$1,500	\$7,500

Objective:

To provide technical planning services and assistance to the Montachusett Regional Transit Authority (MART) which will include the coordination of special transit planning projects, GIS assistance and mapping on identified transit projects such as transit and impact analyses, technical assistance at RTA board meetings and with MART's Job Access Reverse Commute Program (JARC).

Previous work:

- GIS mapping of Fixed Route Transit Services and Updates – 2012, 2013, 2015, 2016
- Solar Voltaic Energy Production and Energy Management System Project – 2013-2014
- 2012 Montachusett Regional Transportation Plan - 2011
- Categorical Exclusions for Ayer Commuter Rail Parking Improvements - 2011
- Expansion of MART Storage Facility Leominster – 2010
- Categorical Exclusions for Acquisition of Property in Leominster for Temporary Parking- 2010
- Wachusett Extension Application for TIGER Discretionary Grant – 2009
- Fitchburg Commuter Rail Line – License Plate Survey – 2009
- Gardner MART Storage and Maintenance Facility - 2008

Methodology:

The FY17 MART technical assistance activities will consist of the following sub-tasks:

- Provide planning and management services as needed, including the maintenance of record keeping systems.
- Coordinate short range transit planning projects with long range transit goals and planning for the Region.
- Provide technical planning assistance to MART and member communities.
- Assist MART in meeting federal reporting requirements related to fixed route services.
- Assess and evaluate bus and van routes, schedules and fare structures.
- Prepare information and data for FTA reports.
- Conduct and review air quality related analysis and data for transit projects.

Product:

Reports to public groups concerning MART activities.

Schedule:

The planning assistance program to the RTA is to be carried out continuously during the program year.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
LTA												

Task 4.33

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
		\$11,000	\$2,750	\$13,750

Objective:

The purpose of this task is to update the Coordinated Public Transit - Human Services Transportation Plan (Coordinated Plan) which was last endorsed in January 2015. The Coordinated Plan focuses on three target populations within the Montachusett region, individuals with disabilities, low-income individuals (or persons below the poverty level) and the elderly, and seeks to identify gaps in existing transportation services and needs to meet those gaps.

The updated Coordinated Plan will include new information on existing transportation resources and newly identified gaps. The plan will also include new demographic data from the census bureau.

At the beginning of the program year a "Successful Grant Writer" training session will be held for any organization (Municipality, PFP, PNP, RTA, or State Agency) that plans to apply for funding in the annual Community Transit Grant Program in May 2018. One of the training sessions that is planned to be held will be for the Section 5310 program. The CHST plan updates will be made after the grant application training to allow time for attendees to add their respective services/projects to the CHST Plan.

Participants in updating this plan will include the Regional Coordinated Council (RCC).

Previous Work:

- Coordinated Public Transit – Human Services Transportation Plan Update - 2014
- Coordinated Public Transit – Human Services Transportation Plan - 2008
- 2012 Montachusett Regional Transportation Plan

Methodology:

- Coordinate with Regional Coordinated Council;
- Develop, set and hold training workshops as required;
- Update 2010 Census data for targeted populations;
- Review Coordinated Plan and revise, update, identify needs and issues;
- Develop recommendations and strategies needed to meet plan requirements.

Product:

Updated Coordinated Public Transit – Human Services Plan

Schedule:

Workshops will be scheduled within first half of program year; Final plan to be completed before September 2018.

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Workshops												
Final Document												

Task 4.43

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$14,000	\$3,500	\$11,000	\$2,750	\$31,250

Objective:

This task will seek to distribute and analyze the results a regional transit survey that can be distributed within the region in order to better identify needs, gaps and issues that are of importance to various populations. The survey to be distributed was produced as part of the 2016-2017 UPWP. The survey will be distributed at several points of interest including town halls, community centers, and other locations as designated in the 2016-2017 UPWP. In addition, the survey will be made available online through the MPO's and municipal websites. Once the survey data has been collected, the results will be analyzed to highlight key needs and issues within the current regional transit system. A report will be created summarizing the key findings from the survey.

Previous Work:

- Transit Development Program Update – Fitchburg and Leominster 2013;
- Transit Development Program Update – Fitchburg and Leominster 2003; 2008
- Transit Development Program Update – GLink 2005;
- Transit Development Program Update – Gardner 2000
- 2016 Regional Transportation Plan
- Ridership Survey Development – UPWP 2016-2017

Methodology:

MRPC Staff will:

- Print and deliver the ridership survey to identified locations for distribution
- Publish the survey on municipal, regional, and other community stakeholder's websites
- Collect and digitize completed surveys and review for quality assurance
- Analyze survey results using quantitative and qualitative methods
- Identify key themes and concerns addressed in survey data
- Produce report summarizing the findings from transit survey

Products:

A report regarding essential needs and concerns of the region's residents regarding public transportation which will inform MRPC staff regarding potential future projects for the improvement of transit access and availability in the Montachusett Region.

Schedule:

To be carried out throughout the program year.

Survey Distribution: November 2017- January 2018

Collection of Completed Surveys: January 2018 – March 2018

Initial Analysis of Results: March 2018 – June 2018

Production of Final Report: June 2018 – September 2018

	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	July 2018	Aug 2018	Sep 2018
Survey Distribution												
Collection of Completed Surveys												
Analysis of Results												
Final Report Production												

Task 4.53

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$7,600	\$1,900	\$6,000	\$1,500	\$17,000

**Montachusett Regional Planning Commission
FFY 2018 Program Year Staffing Report**

Staff	Title	Expected Time on 3C Contract	Expected Time on FTA Contract
Bradford Harris	Transportation Project Director	98%	2%
George Kahale	Transit Project Director	5%	95%
George Snow	Principal Transportation Planner	98%	2%
Sheri Bean	Principal Planner	98%	2%
Brian Doherty	Principal Planner	98%	2%
	Transportation Planner	75%	25%
Jason Stanton	GIS Project Director	50%	15%
Kayla Kress	GIS Technician	50%	15%
	Transportation Intern	100%	-
	Transportation Intern	100%	-

UPWP BUDGET
SUMMARY OF FUNDING BY SOURCE AND TASK
FFY 2018 PROGRAM YEAR

TASK NO./NAME	SPR	PL			FTA - 5303	LOCAL	TOTAL
		FHWA	MassDOT	TOTAL			
1.13 Support of 3C Process	-	\$48,998	\$12,250	\$61,248	\$6,000	\$1,500	\$68,748
1.23 Unified Planning Work Program	-	\$13,600	\$3,400	\$17,000	\$4,000	\$1,000	\$22,000
1.33 Public Info Reporting/Participation Program	-	\$22,800	\$5,700	\$28,500	-	-	\$28,500
1.43 Development of TIP	-	\$40,000	\$10,000	\$50,000	\$6,000	\$1,500	\$57,500
1.53 Environmental Justice/Title VI	-	\$38,000	\$9,500	\$47,500	\$3,000	\$750	\$51,250
Subtotal	-	\$163,398	\$40,850	\$204,248	\$19,000	\$4,750	\$227,998
2.13 Regional Demographics & Model	-	\$21,600	\$5,400	\$27,000	-	-	\$27,000
2.23 GIS Mapping and Analysis	-	\$45,600	\$11,400	\$57,000	\$4,000	\$1,000	\$62,000
2.33 Data Collection & Analysis Program	-	\$28,800	\$7,200	\$36,000	-	-	\$36,000
2.43 Pavement Management Systems	-	\$16,000	\$4,000	\$20,000	-	-	\$20,000
2.53 Sidewalk Inventory & Bicycle/Pedestrian Connections	-	\$20,400	\$5,100	\$25,500	-	-	\$25,500
2.63 Freight Corridor Identification & Screening	-	\$18,400	\$4,600	\$23,000	-	-	\$23,000
2.73 Regional Development Initiative	-	\$15,600	\$3,900	\$19,500	-	-	\$19,500
Subtotal	-	\$166,400	\$41,600	\$208,000	\$4,000	\$1,000	\$213,000
3.13 South Athol Road/Route 2 Interchange Analysis	-	\$31,600	\$7,900	\$39,500	-	-	\$39,500
3.23 Performance Measures & RTP Update	-	\$18,800	\$4,700	\$23,500	-	-	\$23,500
3.33 Climate Change Program	-	\$24,800	\$6,200	\$31,000	\$4,000	\$1,000	\$36,000
3.43 Local Technical Assistance	-	\$20,000	\$5,000	\$25,000	-	-	\$25,000
3.53 Local ADA Transition Plan Development	-	\$26,800	\$6,700	\$33,500	-	-	\$33,500
3.63 Regional Transportation Needs Assessment	-	\$26,000	\$6,500	\$32,500	-	-	\$32,500
3.73 Regional Bike & Ped Trail Update	-	\$18,400	\$4,600	\$23,000	-	-	\$23,000
Subtotal	-	\$166,400	\$41,600	\$208,000	\$4,000	\$1,000	\$213,000
4.13 Transportation Equity & Public Involvement	-	-	-	-	\$2,955	\$739	\$3,694
4.23 Short Range Transportation Planning	-	-	-	-	\$6,000	\$1,500	\$7,500
4.33 Technical Assistance to MART	-	-	-	-	\$11,000	\$2,750	\$13,750
4.43 Coordinated Transit Plan Update	-	\$14,000	\$3,500	\$17,500	\$11,000	\$2,750	\$31,250
4.53 Ridership Survey Distribution	-	\$7,600	\$1,900	\$9,500	\$6,000	\$1,500	\$17,000
Subtotal	-	\$21,600	\$5,400	\$27,000	\$36,955	\$9,239	\$73,194
TOTAL FFY 2018	-	\$517,798	\$129,450	\$647,248	\$63,955	\$15,989	\$727,192

SUMMARY OF FUNDING BY SOURCE AND ELEMENT
FFY 2018 PROGRAM YEAR

ELEMENT	FHWA/MassDOT		FTA - 5303	LOCAL	TOTAL
	SPR	PL			
1	-	\$204,248	\$19,000	\$4,750	\$227,998
2	-	\$208,000	\$4,000	\$1,000	\$213,000
3	-	\$208,000	\$4,000	\$1,000	\$213,000
4	-	\$27,000	\$36,955	\$9,239	\$73,194
TOTAL	-	\$647,248	\$63,955	\$15,989	\$727,192

SUMMARY OF FUNDING BY SOURCE AND GRANTEE
FFY 2018 PROGRAM YEAR

GRANTEE	FHWA/MassHighway		FTA - 5303	LOCAL	TOTAL
	SPR	PL			
MRPC	-	\$647,248	\$63,955	\$15,989	\$727,192
LOCAL GOVT (MART)	-	-	-	-	-
TOTAL	-	\$647,248	\$63,955	\$15,989	\$727,192

*100% FTA FUNDING FOR PRIVATE SECTOR ACTIVITIES

* NOTE: Source of Local Funds: Local Assessment, State and Other Sources (i.e. interest, etc.) and MART. No Section 5307 funds are included.

MRPC FEDERAL FISCAL YEAR "PL" ALLOCATIONS

FY	ANNUAL	CUMULATIVE
1974-2004	\$1,434,456.00	\$5,875,735
2005	\$506,127.00	\$6,381,862
2006	\$496,737.00	\$6,878,599
2007	\$508,486.00	\$7,387,085
2008	\$546,217.00	\$7,933,302
2009	\$567,231.00	\$8,500,533
2010	\$582,543.00	\$9,083,076
2011	\$563,751.00	\$9,646,827
2012	\$563,751.00	\$10,210,578
2013	\$555,297.00	\$10,765,875
2014	\$570,098.00	\$11,335,973
2015	\$544,557.00	\$11,880,530
2016	\$585,751.00	\$12,466,281
2017	\$621,347.00	\$13,087,628
2018	\$647,248.00	\$13,734,876

MRPC "PL" EXPENDITURES

CONTRACT #	AMOUNT	SPENT	CUMULATIVE
18281-88006-24717	\$1,442,781.61	\$1,396,386.79	\$1,396,386.79
6047	\$165,000.00	\$165,000.00	\$1,561,386.79
94022	\$772,599.00	\$678,525.78	\$2,239,912.57
96506	\$1,278,009.00	\$930,861.89	\$3,170,774.46
30049	\$1,427,409.00	\$1,427,134.28	\$4,597,908.74
4034020	\$1,941,815.00	\$1,528,445.40	\$6,126,354.14
0052453	\$2,354,263.00	\$2,081,355.65	\$8,207,709.79
69656	\$2,429,837.00	\$2,205,964.00	\$10,413,673.79
88872	\$2,343,484.00	\$874,003.19	\$11,287,676.98 *

Cumulative PL Allocation \$13,734,876.00

- Cumulative Amount Spent \$11,287,676.98 *

- \$4,287.57

\$2,442,911.45

- \$25,000.00

\$2,417,911.45

Overhead rate adj. from Contract #22725

Approved Addn'l Funds from PL Balance 9/12/2005

Estimated remaining bank balance**

*Estimated Expenditure Through April 30, 2017

2018 Unified Planning Work Program Funding

FFY 18	FFY 17	Δ
\$ 9,325,022	\$ 9,074,202	
93.1%	93.1%	
\$ 8,683,460	\$ 8,449,897	2.69%
\$ 10,854,326	\$ 10,562,371	

apportionment
obligation authority
federal PL funds only
matching funds added

The recommended PL Allocation Formula was developed by the Massachusetts Association of Regional Planning Agencies and recommended by MassDOT to FHWA, is based upon the following three factors: 40% of available funds divided equally among the ten MPOs, 30% is allocated based on each MPO's relative share of Massachusetts population, and 30% is allocated based on each MPO's relative share of urbanized population. These factors result in the percentages shown.

PL funds are provided to the MPOs from the previous year's federal-aid ("forward funded")

Contract status	40% of total funds/ten MPOs	30% of funding for relative size of population	30% of funding for relative size of urbanized population	Total FFY18 funding by MPO	Federal aid number	PARS number
MPOs PL funded						
Berkshire	\$ 4,341,730	\$ 3,256,298	\$ 3,256,298	\$ 10,854,326		
Boston	\$ 434,173	\$ 66,251	\$ 88,795	\$ 549,003		
	\$ 434,173	\$ 1,581,198	\$ 3,098,347	\$ 3,694,506		
CTPS						
Yr 1				\$ 2,992,550		
MAPC						
Yr 1				\$ 701,956		
Cape Cod						
Yr 2	\$ 434,173	\$ 215,888	\$ 198,826	\$ 848,887		
Yr 3	\$ 434,173	\$ 556,698	\$ 462,724	\$ 1,453,595		
Central Mass						
Yr 2	\$ 434,173	\$ 333,748	\$ 316,362	\$ 1,084,283		
Yr 3	\$ 434,173	\$ 236,475	\$ 171,236	\$ 841,884		
Montachusett						
Yr 2	\$ 434,173	\$ 286,901	\$ 277,474	\$ 998,548		
Yr 3	\$ 434,173	\$ 348,527	\$ 328,231	\$ 1,110,931		
Northern Middlesex						
Yr 2	\$ 434,173	\$ 144,853	\$ 151,804	\$ 730,830		
Yr 3	\$ 434,173	\$ 160,856	\$ 163,627	\$ 758,656		
Old Colony						
Yr 2	\$ 434,173	\$ 621,570	\$ 537,074	\$ 1,592,817		
Yr 3	\$ 434,173	\$ 311,349	\$ 531,236	\$ 1,036,157		
Pioneer Valley						
Yr 2	\$ 434,173	\$ 313,823	\$ 293,829	\$ 1,041,825		
Yr 3	\$ 434,173	\$ 311,349	\$ 290,635	\$ 1,036,157		
Southeastern Mass						
Yr 2	\$ 434,173	\$ 616,670	\$ 531,236	\$ 1,582,079		
Yr 3	\$ 434,173	\$ 311,349	\$ 290,635	\$ 1,036,157		
	\$ 4,341,730	\$ 6,449,550	\$ 5,952,013	\$ 3,256,298	\$ 10,854,326	

Contract status	SPR the year before (federal only)	FFY 18 total funding by RPA	Federal aid number	PARS number
RPAs SPR funded				
Franklin	2.69%	\$ 421,653		
Martha's Vineyard	2.69%	\$ 241,780		
Nantucket	2.69%	\$ 205,664		

The SPR funding provided to the RPAs not officially recognized as MPOs is adjusted year-to-year based on the change in funding experienced by the MPOs for their PL funds.

APPENDIX A – MRPC FUNDING SOURCES AND PLANNING ACTIVITIES

Other planning activities currently taking place involving the Montachusett Regional Planning Commission include the following:

- As part of MRPC's contract with the federal Department of Commerce, Economic Development Administration, MRPC provides assistance to communities seeking grant funds to improve economic vitality. MRPC staff assisted Winchendon and Ashby to prepare a regional FY16 Community Development Block Grant application for Housing Rehabilitation and Home Heating Fuel Assistance in both Winchendon and Ashby, and improvements to Walnut Street in Winchendon. The grant application was funded in the amount of \$1,000,000 by the Massachusetts Department of Housing and Community Development. MRPC is administering the grant for Winchendon and Ashby and the beneficiaries of these programs are low and moderate income residents.
- MRPC staff also assisted Lancaster, Shirley, Townsend, and Winchendon to prepare FY17 Community Development Block Grant applications for Housing Rehabilitation, Residential Home Heating Fuel Assistance, an Infrastructure Project in Winchendon, and a Spectacle Pond Architectural Barrier Removal Project in Lancaster. This year, block grants were due and submitted on March 10, 2017.
- On October 1, 2015, MRPC and the federal Environmental Protection Agency (EPA) executed a three-year term Cooperative Agreement in the amount of \$400,000 for Community-wide Brownfields Assessments for hazardous substances and petroleum contaminated sites. MRPC hired a qualified engineering firm (TRC, Lowell, MA) to assist with the conduction of Phase I and Phase II environmental site assessments. Besides site assessments, grant funds are being used to conduct community outreach activities and cleanup planning. Community-wide petroleum grant funds are also being used for the same tasks at sites with potential petroleum contamination. This project continues.
- MRPC recently completed the Town of Templeton's Master Plan. The final draft document was presented at a public forum held in Templeton on January 12th and was adopted by the Templeton Planning Board on March 28, 2017 concluding the project.
- Through Chapter 205 of the Acts of 2006, Massachusetts has provided funding to regional planning agencies to provide technical assistance to their communities through the State's District Local Technical Assistance (DLTA) program. MRPC is assisting several communities in the areas of achieving sustainable development and land use objectives and establishing partnerships among communities. All current DLTA projects will be completed by December 31, 2017.

The following DLTA projects have been initiated:

- **Hubbardston:** Master Plan Economic Development Element.
- **Athol:** Master Plan Economic Development Element
- **Athol:** Templeton Road (Route 2A) Design Guidelines for Town of Athol Gateway
- **Ashburnham:** Master Plan Economic Development Element
- **Shirley:** Create a Permitting Guidance Handbook
- **Lancaster:** Assist with the update of the 2010 Lancaster Open Space & Recreation Plan
- **Ayer:** Transit oriented Development Planning Project in the Downtown Ayer Rail Commuter Station/Depot Square and Park Street Corridor Area.
- **MRPC:** Region – Wide Industrial Lands Analysis.

The following potential DLTA projects are pending and require MRPC Planning Commission and MA Dept. of Housing and Community Development approval:

- **Westminster:** Housing Production Plan.
- **Harvard:** Research and Recommend Land Use Strategy(s) for Protecting Water Supplies.
- **Sterling:** Feasibility Study of Future Sewage Services in Specified Regions of the Town.
- **Lunenburg:** Facilitate the Formation of a Business – Town Partnership including a Charrette, and Methods to Promote Economic Development.

SUMMARY OF OTHER MRPC FUNDING SOURCES

Agency	Program	Funding Total
Montachusett Regional Planning Commission	<i>Local Assessments</i>	\$75,483
Local Communities	<i>GIS</i>	\$8,000
U.S. Dept. of Transportation Federal Transit Administration	<i>Section 5303 Technical Assistance Grant (10/1/16-9/30/17)</i>	\$22,918
Environmental Protection Agency	<i>Brownfields Cleanup/Petroleum</i>	\$208,167
U.S. Dept. of Commerce Economic Development Administration	<i>Section 203 Area Planning Assistance Grant (4/1/17-3/30/18)</i>	\$65,625
Town of Ashburnham	<i>Distressed Properties Initiative</i>	\$60,382
U.S. Dept. Of Transportation Federal Transit Administration	<i>Section 5303 Technical Assistance Grant (10/1/17-9/30/18)</i>	\$46,556
Massachusetts Dept. of Housing & Community Development	<i>District Local Technical Assistance Round 10 (1/1/17 – 12/31/17)</i>	\$108,703
Massachusetts Dept. of Housing & Community Development	<i>Winchendon/Ashby CDBG Grant</i>	\$135,096
Montachusett Regional Transit Authority	<i>Technical Assistance</i>	\$125,000
Town of Townsend	<i>CDBG Program Income</i>	\$8,100
Massachusetts Dept. of Housing & Community Development	<i>District Local Technical Assistance- Round 11 (1/1/18 – 12/31/19)</i>	\$98,820.00
U.S. Dept. of Commerce Economic Development Administration	<i>Section 203 Area Planning Assistance Grant (4/1/18-3/31/19)</i>	\$70,000.00

APPENDIX B – GLOSSARY/ ACRONYMS

Acronyms and Abbreviations

3C	Continuing, Cooperative and Comprehensive Transportation Planning
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ABP	Accelerated Bridge Program
ADA	Americans with Disabilities Act (1990)
ADT	Average Daily Traffic
AMPO	Association of Metropolitan Planning Organizations
ANR	Approval Not Required Plans
APA	American Planning Association
APTA	American Public Transportation Association
ATR	Automatic Traffic Recorder
AVL	Automatic Vehicle
BMP	Best Management Practice
BMS	Bridge Management System
CAAA	Clean Air Act Amendments of 1990
CDBG	Community Development Block Grant
CEDS	Comprehensive Economic Development Strategy
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CHNA 9	Community Health Network Area 9
CMAQ	Congestion Mitigation and Air Quality
CMS	Congestion Management System
CRFCs	Critical Rural Freight Corridors
CSS	Context Sensitive Solutions
CUFCs	Critical Urban Freight Corridors
DEP	Department of Environmental Protection
DHV	Design Hour Volume
DLTA	District Local Technical Assistance
DRS	Demand Responsive Service
EDA	Economic Development Administration
EIR	Environmental Impact Report
EIS	Environmental Impact Study/Statement
EJ	Environmental Justice
ENF	Environmental Notification Form
EOEEA	Executive Office of Energy and Environmental Affairs
EPA	Environmental Protection Agency
EPDO	Equivalent Property Damage Only
FAST Act	Fixing America's Surface Transportation Act (2015-2020)
FASTLANE	Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies Grants Program
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year (begins October 1 st to September 30 th)
FHWA	Federal Highway Administration
FO	Functionally Obsolete
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year (July 1 st to June 30 th)

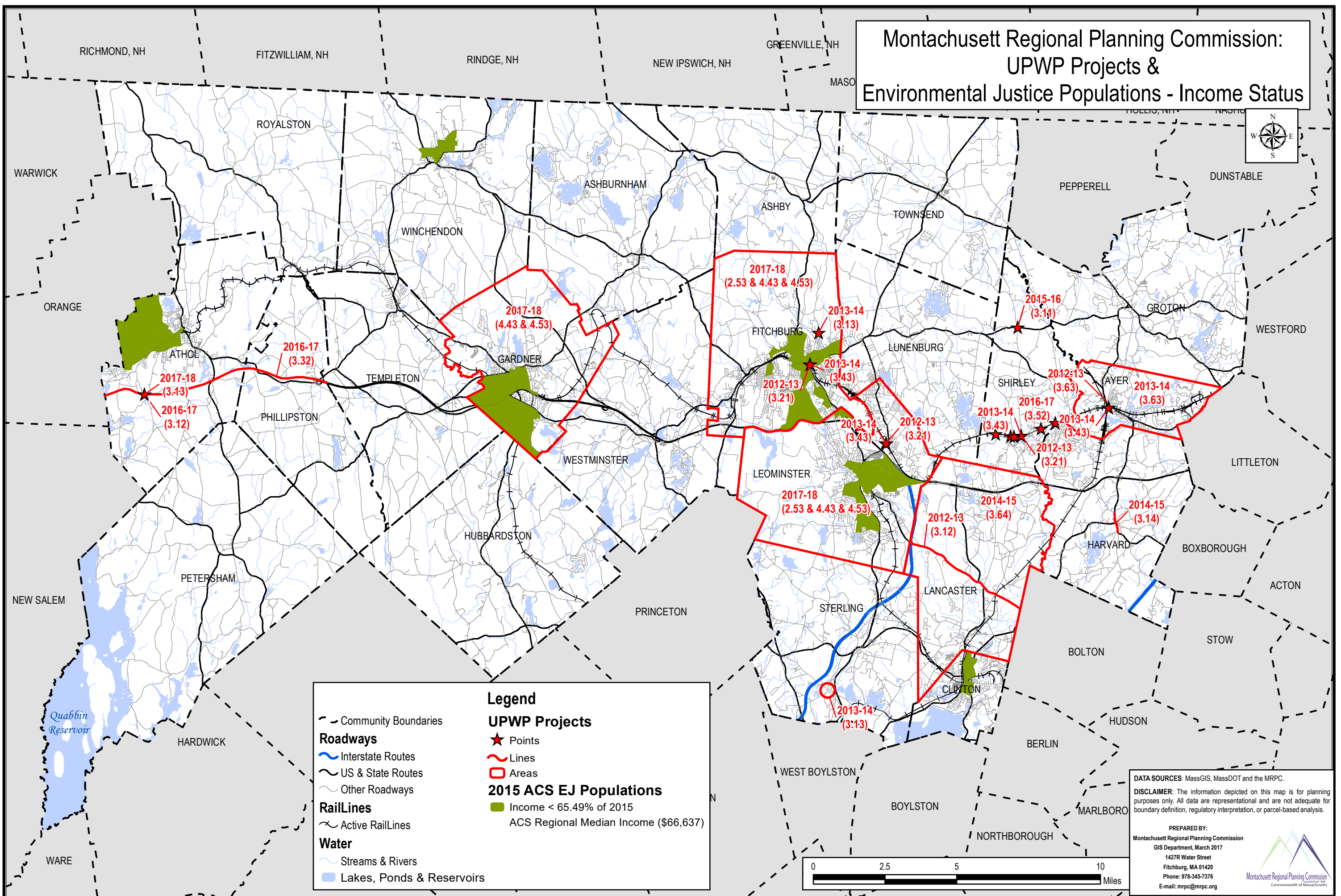
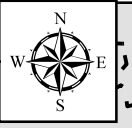
GANs	Grant Anticipation Notes
GIS	Geographic Information System
GPS	Global Positioning System
GVW	Gross Vehicle Weight
HAZMAT	Hazardous Material
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HPP	High Priority Project
HSIP	Highway Safety Improvement Program
HTF	Highway Trust Fund
I/M	Inspection and Maintenance
IM	Interstate Maintenance
ISTEA	Intermodal Surface Transportation Efficiency Act (1991-1997)
ITC	Intermodal Transportation Center
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System
JARC	Job Access Reverse Commute
LOS	Level of Service
LRT	Light Rail Transit
L RTP	Long-Range Transportation Plans
MAP	Mobility Assistance Program
MAP-21	Moving Ahead for Progress in the 21 st Century (2012-2015)
MARPA	Massachusetts Association of Regional Planning Agencies
MART	Montachusett Regional Transit Authority
MARTA	Massachusetts Association of Regional Transit Authorities
MBTA	Massachusetts Bay Transportation Authority
MassDOT	Massachusetts Department of Transportation
MEMA	Massachusetts Emergency Management Agency
MIS	Major Investment Study
MJTC	Montachusett Joint Transportation Committee
MMPO	Montachusett Metropolitan Planning Organization
MOE	Measures of Effectiveness
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MRPC	Montachusett Regional Planning Commission
MRTC	Montachusett Regional Trail Coalition
MSA	Metropolitan Statistical Area
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NARC	National Association of Regional Councils
NEPA	National Environmental Policy Act
NFA	Non-Federal Aid
NHFN	National Highway Freight Network
NHFP	National Highway Freight Program
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NSBP	National Scenic Byways Program

NTP	Notice to Proceed
NTS	National Transportation System
OA	Obligational Authority
OTP	Office of Transportation Planning
PHF	Peak Hour Factor
PHFS	Primary Highway Freight System
PL	Planning Funds
PMS	Pavement Management System
PMT	Personal Miles Traveled
PMUG	Pavement Management User's Group
PPP	Public Participation Program
PRC	Project Review Committee
PS&E	Plans, Specifications & Estimates
PWED	Public Works/Economic Development
RABA	Revenue Aligned Budget Authority
RFP	Request for Proposals
RFQ	Request for Quotes
RFR	Request for Referrals
ROW	Right of Way
RPAs	Regional Planning Agencies
RPOs	Rural Planning Organizations
RRF	Request a Release of Funds
RTA	Regional Transit Authority
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005-2009)
SEIR	Supplemental Environmental Impact Report
SIP	State Implementation Plan
SPR	State Planning and Research Funds
SOV	Single Occupant Vehicle
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TCM	Transportation Control Measure
TCSP	Transportation and Community System Preservation
TDM	Travel Demand Management
TDP	Transit Development Plan
TE	Transportation Enhancement
TEA-21	Transportation Equity Act for the 21 st Century (1998-2003)
TIGER	Transportation Investment Generating Economic Recovery
TIGGER	Transit Investment in Greenhouse Gas and Energy Reduction
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMC	Turning Movement Count
TOD	Transit Oriented Development
TSM	Travel/Transportation System Management
UPWP	Unified Planning Work Program
UZA	Urbanized Areas
V/C	Volume to Capacity Ratio
VMS	Variable Message Sign

VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VPH	Vehicles Per Hour

APPENDIX C – UPWP DISTRIBUTION OF STUDIES AND TASKS MAPS

Montachusett Regional Planning Commission: UPWP Projects & Environmental Justice Populations - Income Status



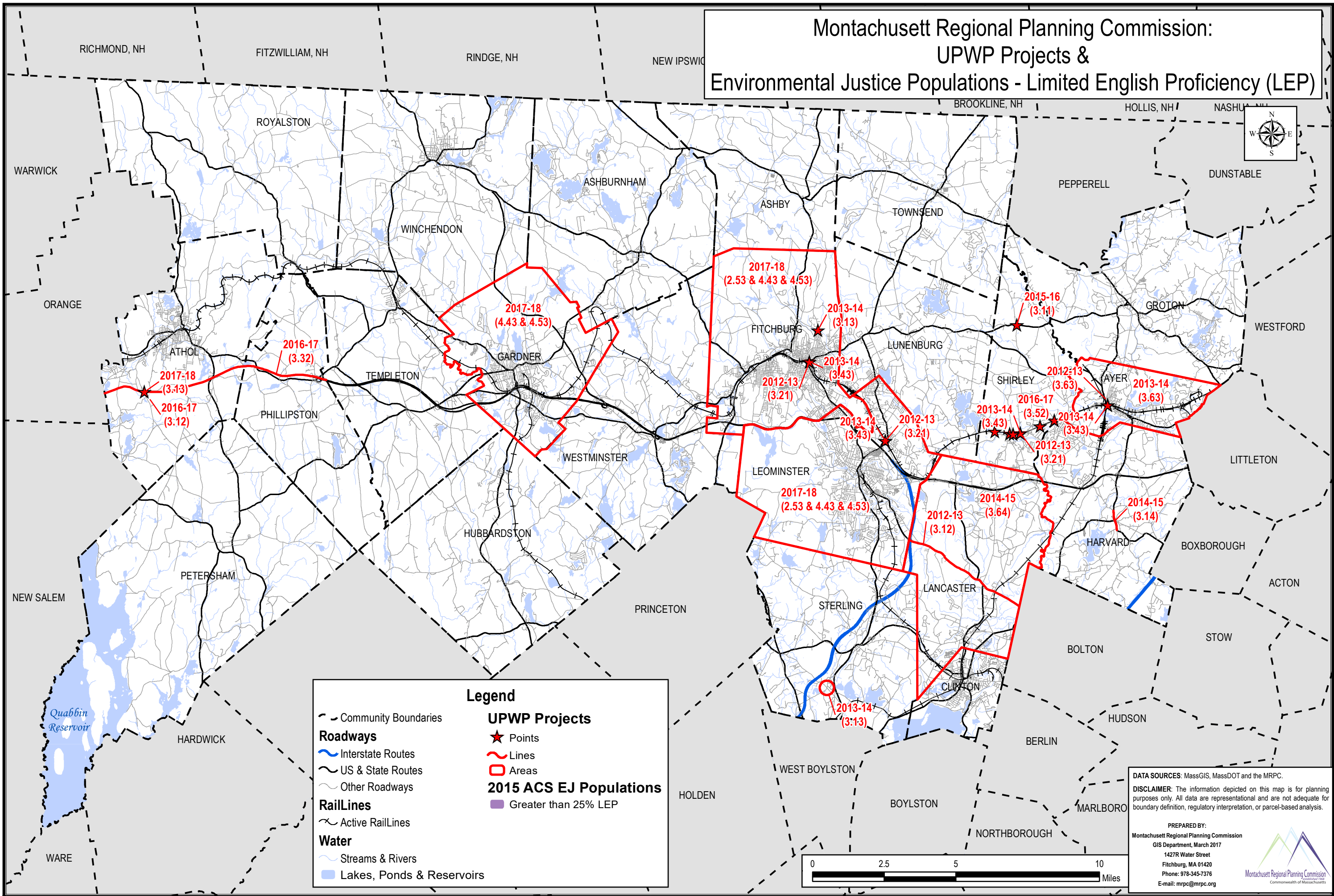
DATA SOURCES: MassGIS, MassDOT and the MRPC.

DISCLAIMER: The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

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Montachusett Regional Planning Commission
Commonwealth of Massachusetts

Montachusett Regional Planning Commission:
UPWP Projects &
Environmental Justice Populations - Limited English Proficiency (LEP)

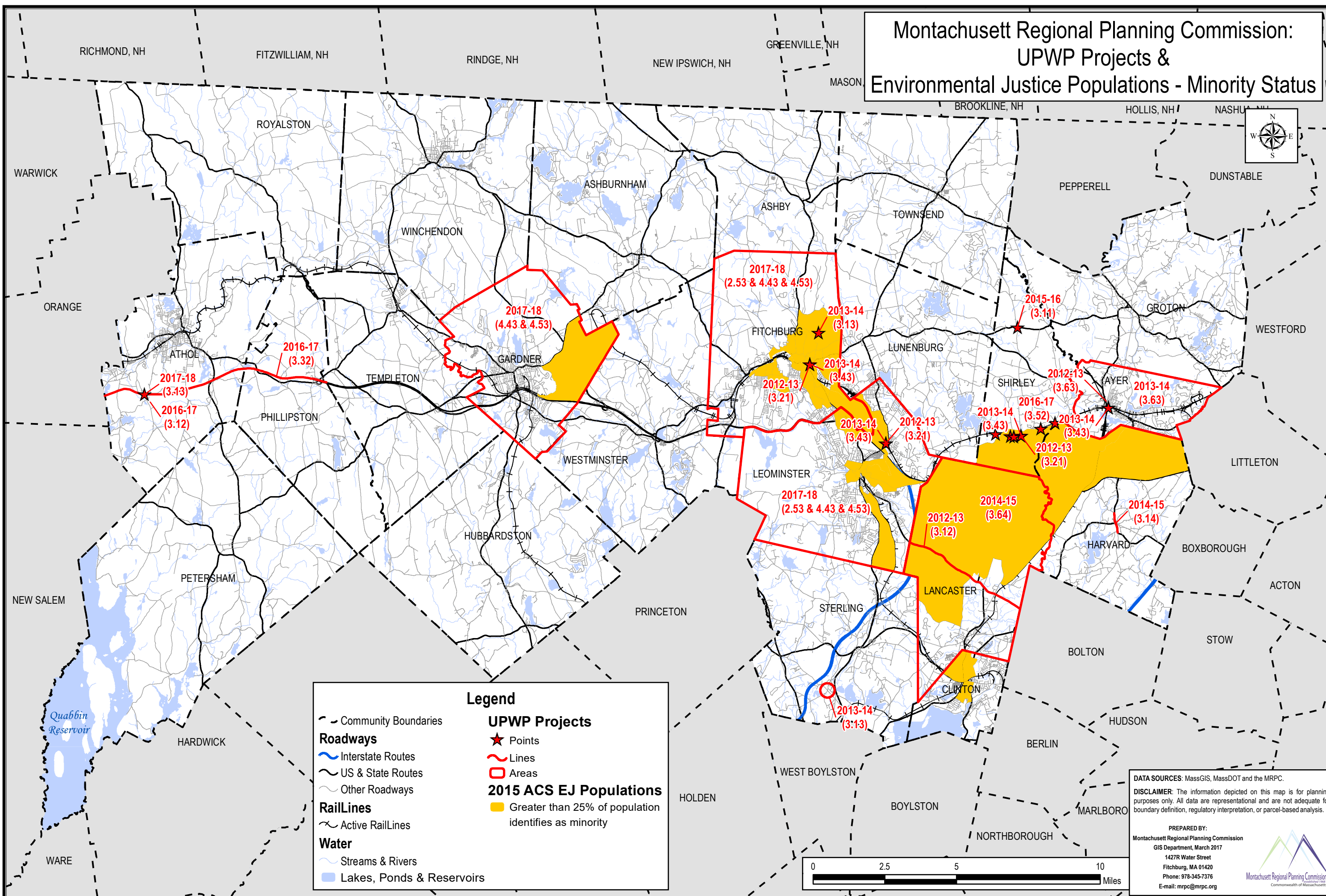
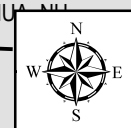


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Montachusett Regional Planning Commission: UPWP Projects & Environmental Justice Populations - Minority Status



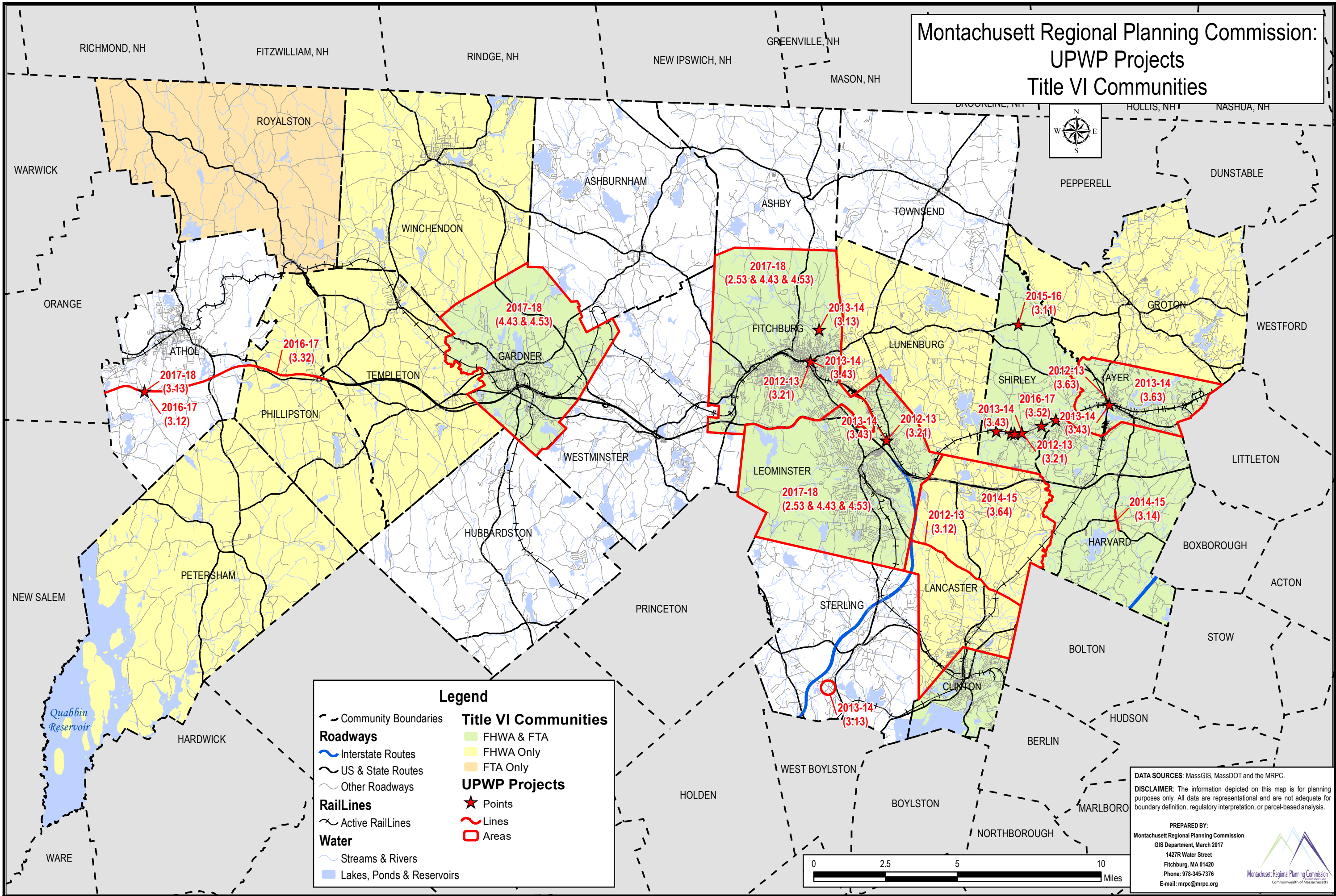
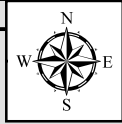
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Montachusett Regional Planning Commission:
UPWP Projects
Title VI Communities



DATA SOURCES: MassGIS, MassDOT and the MRPC.
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APPENDIX D – COMMENTS AND RESPONSES

COMMENTS AND RESPONSES

Action	
Comment 1.	<p>Letter from MassDOT, OTP indicating the following items:</p> <ul style="list-style-type: none"> • Reference document as “FFY 2018 Unified Planning Work Program” or “FFY 2018 program year” rather than October 1, 2017-September 30, 2018 or 2017-2018 program year throughout document. • All task schedules should reflect FFY 2018 timeline. Some refer to FFY 2017. • Under the section entitled “UPWP Distribution of Studies and Tasks”, provide a narrative analysis on whether the distribution is equitable or if there are any areas for improvement. • Under Task 1.23 (Unified Planning Work Program), update schedule to reflect coordination with the Capital Investment Plan (CIP) timeline. Process should take place January 2018 to May/June 2018 with MPO Endorsement sought no later than June 2018. • Under Task 1.43 (Transportation Improvement Program), update schedule to reflect coordination with the Capital Investment Plan (CIP) timeline. MPO Endorsement should be sought no later than May 2018. • Under Task 1.53 (Environmental Justice/Title VI), include an equity analyses for 3C documents as part of the task. • Under Task 2.63 (Freight Corridor Identification & Screening), include a public participation element involving freight stakeholders in the methodology.
Response 1.	Requested updates and references made to final UPWP document to reflect and address comments.